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Using a systematic review to uncover theory and outcomes for a complex intervention in health and social care: Life Story Work for people with dementia as a worked example

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SCHOLARONE™ Manuscripts Using a systematic review to uncover theory and outcomes for a complex intervention in health and social care: Life Story Work for people with dementia as a worked example

Objectives: To use a systematic review to uncover theor<u>iesy of change</u> and outcomes for Life Story Work (LSW) in dementia care to inform a feasibility study. We describe the methods used and discuss-their use in identifying appropriate outcomes for evaluative research, and their potential for improving evaluation of 'theory poor' interventions.

Life Story Work (LSW) involves gathering information about a person, their history and interests and producing a tangible output, usually a book. It is used increasingly in dementia care; however, underlying theory about if, how and why it affects which outcomes is poorly developed, making the choice of evaluation methods and appropriate outcomes difficult.

Methods

A systematic review, carried out using Centre for Reviews and Dissemination guidelines, searched for evidence on underlying theory, good practice, and effectiveness of LSW to inform a feasibility study. For the theory element, a 'landscaping review' analysed the extracted text, was analysed using qualitative techniques and mind maps to uncover both explicit and implicit links (causal linksroutes) between LSW and outcomes. We triangulated review findings with qualitative work-research (focus groups) with people with dementia, caregivers, and professionals that explored the outcomes that they would like to see from LSW.

Results

Of the 56 publications reviewed, only 16 were useful for the theory analysis. Six overarching outcomes were identified: the self-worth and empowerment of people with dementia; individual psychological outcomes; improved relationships between care staff and the individual with dementia; better care; more effective engagement of family members/carers within the care setting; and helping carers to cope. Twelve final theories linking these outcomes to LSW via a causal pathway were elicited. There was substantial overlap in the outcomes identified by the review and the interviews withby carers, people with dementia and professionals. Together, the results informed our choice of outcome measures for a pilot evaluation.

Conclusions

This approach may enable researchers to identify and develop the theory necessary before evaluation of a complex intervention in other under- or un- theorised areas. It has the potential both to shorten development stages (and thereby costs) in intervention research and with the potential to improve the intervention itself.

Introduction

The evidence for complex interventions in health and social care, particularly those that cross the health and social care boundary, is often weak. For example, despite systematic reviews of large literatures, the recent draft English guideline for people living with dementia and their carers was able to develop only one 'do' recommendation for interventions to promote cognition, independence and well-being. Similarly, a recent meta-review of interventions to support carers of people with a range of conditions pointed to 'the dearth of good-quality primary research about the effectiveness of most support interventions for carers' (p.77). Two major issues underlie this weakness.

First, there is a the simple lack of evaluative research, particularly in social care where the literature largely comprises descriptions of the intervention, accounts of its use in practice settings and, occasionally, some measure of outcome after implementation but none before. Secondly, even where evaluation exists, it is often undermined by the absence of any theoretical underpinning that links the outcomes reported with the intervention being evaluated (pp.77-8).² As a result, evaluation searches for improved outcomes without any pre-existing theory about why and how we might *expect* the particular intervention to affect the given outcome.² Evaluation then proceeds with chosen outcomes that might have little likelihood of being affected by the intervention. This pattern is becoming less common with the adoption of MRC guidelines for the evaluation evaluating of complex interventions^{33,4} but systematic reviews of such interventions are likely to remain hampered by the lack of clear, theory-driven evidence for some years to come.

Both these issues may reflect historic underfunding of research in such areas, where both policy and practice can encourage a 'rush to evaluation' (and, indeed, a 'rush to implementation') of intuitively attractive interventions before the preliminary work to underpin both their development and testing has been done.²,⁵

This was the situation we found when embarking on a feasibility study for formal evaluation of life story work (LSW) in dementia care.⁶

LSW gathers information and artefacts about people, their history and interests, and produces a picture book or other tangible output – the 'life story'. The story'. It has been used in health and social care settings for nearly three decades, with children, people with learning disabilities, and older people. Understanding the rich and varied histories of people with dementia is seen as essential to good care. Since the 1990s there has been growing interest in LSW as a way of achieving this understanding to deliver person-centred care. It is now used in dementia care across the world.

LSW is distinct from reminiscence and 'biographical work', ¹³ because it emphasises using the life story in day-to-day care and is oriented to the future. Life stories, as-The tangible products, are owned and held by people with dementia and can travel with them to other settings, for example into acute medical care or from home to long-term care. LSW is thus also different from the simple logging of life history details in care records.

LSW has key features that justify its description asof a complex intervention, as defined by MRC Guidance.⁴ It can involve large numbers of and interactions between its components, significant numbers and difficulty of behaviours for those who deliver and receive it, targets for the need for change at more than one organisational level, numerous and variable outcomes, and flexible and tailored delivery.

Embarking on our study, LSW seemed an archetypal example of an under-theorised and under-evaluated intervention that was nonetheless popular in care delivery. There was enthusiasm for it, practitioners felt that they observed change when they usedusing it, but it was difficult to pin down any theory about why these changes might eome aboutoccur. For In evaluating evaluative work on LSW (as for many other interventions in health and social eare), there was thus a danger that evaluation might choose the wrong outcomes — both intermediate and final — might be to assessed. Research might then fail to demonstrate change, when e change it was actually taking place, or demonstrate change that had little to do with the intervention's underlying aims.

The first stage of our work included a systematic review of the existing literature. While we did not exclude the possibility of finding some evidence of the effectiveness or costs of LSW, the developmental and feasibility-testing nature of the project meant that it was more important to identify different approaches to LSW, and to elucidate its theories of change its theoretical model(s). This would then help to identify intermediate processes that might be important in implementation, and outcome measures that could be sensitive to the intervention in full-scale evaluation. The complete review, covering all its objectives, is described elsewhere; here we present a reflexetive account of using qualitative analysis of published texts to identify underlying theoretical models for LSW.

The processes and challenges of using systematic review methods for identifying and synthesising theory in areas that are already well-theorised but usually contested, and for developing a theoretical model to help with the design of a review, have already been written about 14-16. In areas already well served by evidence across the causal chain between intervention and outcomes, theoretical models for programme theories of interventions, elements of care deliveryprocesses and outcomes, have been developed using existing literature, stakeholder interviews, previous research and experience (p.9). 17, 18, 19 By contrast,

we are writing here about the processes, challenges and benefits of using a systematic review to uncover intervention theory when both theory *and* evidence are scarce, in order to choose appropriate outcomes for primary research. As such, this is a 'theory-landscaping' review, that identifies the outcomes of an intervention and the implied explanations of the links between intervention and outcomes.²⁰

We defined theory for this part of our work more widely than 'realistic' or 'realist' approaches might recommend or that others conducting systematic reviews of theory have done. Thus, while we hoped to find writing that described context, mechanism and outcome or that allowed description of 'a-causal association' connecting LSW to an outcome 'through a specific pathway or mechanism' (p.5), 16 we examined *any* literature that argued *any* kind of outcome from LSW.

Our project also included qualitative work focus groups with people with dementia (facilitated by *Innovations in Dementia*), informal carers and LSW professionals. This explored both what people thought would be 'good practice' in LSW²³ and what outcomes might be expected to emerge from doing it well. Having both elements in the project presented an opportunity to compare different methods for identifying relevant outcomes for evaluation.⁶

Methods

We followed CRD guidance²⁴ for the conduct of systematic reviews, intending to use a narrative synthesis²⁵ of the extracted material, and a 'realist'- informed approach.^{21, 22}

All elements were carried out between August 2012 and May 2014 and a full description of methods and findings is available.⁶ Here we give brief details of the whole review for context, while concentrating in detail on the theory element where the main research question was:

 What underlying logic models or theories of change for LSW are articulated in the literature?

Search strategy

An information specialist (WW) carried out the searches, using electronic searching of a range of databases covering the fields of health, mental health, nursing and social care. Search strategies focussed on the retrieval of published studies and 'grey literature' where interventions were described explicitly as life story/life history/life review or life narrative within the title/abstract. The complete search strategies are included in the final report⁶ and an example is_at_1 in the on-line supplementary orting-material. The searches were carried out in August and September 2012, were not limited by date, but were limited to English language results.

The results were loaded into EndNote bibliographic software and de-duplicated using several algorithms.

The reference lists of all articles included for review were searched for relevant additional studies.

Inclusion and exclusion criteria

We developed inclusion and exclusion criteria based on the literature and in consultation with the project steering group and our project advisers, and finalised them through an iterative process during the early stages of searching (table 1).

Selection of studies for relevance

We selected material first using titles and abstracts (where available) to assess relevance. Two researchers (XX and YY) worked individually and then in pairs to reach agreement about relevant studies. We then obtained full copies of the studies selected for relevance and read them before making a final decision about inclusion for review. Three members of the team (XX, YY, ZZ) worked individually and then in pairs to reach agreement about relevant studies. Where we could not reach agreement in pairs, the third member of the team arbitrated.

For the theory element, we were interested in any links that authors made - either explicitly or implicitly - between doing LSW and outcomes (whether for people with dementia, family members/carers or care staff). We originally included publications that argued *any* connection between LSW and *any* outcome, whether or not they also described intermediate causal links, were also described. At the final stage, we further excluded two papers that did not articulate any type of causal link between LSW and the outcome.

Quality assessment

Given the limited evaluative literature on LSW, and the nature of our research questions, we did not include or exclude papers based on their methodological quality.

Data extraction

Data extraction focussed on outcomes reported as arising, actually or potentially, from LSW, for whom these outcomes arose, explicit or implicit assumptions about causation, and any data on changes in outcomes. We also extracted details about the type of LSW described, participants, the care setting, study design and any data or discussion related to good practice in LSW.

For the theory element of the review, the unique data extraction headings were:

- model of LSW
- argued links between LSW and outcomes
- types of primary (final) outcomes argued or demonstrated
- types of intermediate or process outcomes (causal links) argued or demonstrated
- contextual influences and factors that might affect outcomes.

All data extraction for the theory part of the review was carried out by one researcher (YY) and progress and initial findings shared and discussed with team members and the project steering group. Data analysis and synthesis

Identifying underlying logic models

All findings for the theory review were analysed qualitatively and, where possible, metasynthesised, which involved aggregating conclusions from the reviewed publications to generate a set of statements that represented that aggregation, with the aim of producing a single comprehensive set of synthesised findings.

Clear accounts of underlying theory about LSW's impact on outcomes were not common. However, implicit arguments within text were analysed qualitatively to expose implicit theory. The worked example (table 2) shows how we did this from theoretical models deeply embedded in descriptive or discursive text, rather than articulated explicitly.

We used this process to identify all causal links between LSW and the outcome or outcomes that the authors were arguing. In some papers, there was a single such theory; in others there were several. We summarised these theories into an Excel spreadsheet using the data headings outlined earlier, and then mapped them all in a mind map.²⁶

We looked both for theories articulated in the introductory sections of each paper (initial theories) and again for those articulated in the discussion and concluding sections (concluding theories). In both cases, we concentrated on theories that the authors themselves were arguing, not ones that they were repeating or reviewing from others' publications. (See 2 in the supplementary material for the map of the concluding theories. This is displayed to Only two levels of the map are shown level two only, given the complexity of the diagram).

We synthesised the material from the mind maps, and identified a set of overarching outcomes. Given that most Most of the papers in this part of the review included some empirical work (even if only a description of the use of LSW). We therefore, we took the used concluding theories as the basis for this final stage of analysis, assuming that these would be a more accurate reflection of the authors' views about LSW, its outcomes and its causal pathways.

Results

Numbers of papers identified

The PRISMA diagram (figure 1) shows the process through which the 657 identified studies were reduced to a final selection of 56 papers for the whole review and 18 for the theory work. Two theory papers were subsequently removed (see p.8). We also identified sixTwo existing systematic reviews or meta-analyses were included in the wider review, but none of these was used for the theory workneither synthesized programme theory relating to LSW processes and outcomes. Publication details for the whole review are in the final report. Table 3 shows Details of the 16 studies that were included in the theory work are in table 3.

As figure 1 suggests, little of the identified literature few studies presented any explicit or even implicit explanation of why LSW might lead to better outcomes for people with dementia, their carers or care staff.

Theories for LSW

The mind mapping generated complex and complicated pictures of both initial and concluding theory. The included papers outlined 26 initial, but 47 concluding theories.

Some theories were relatively simple, with only one intermediate outcome or mechanism between LSW and a final outcome. So, for example, concluding theory 3 (see appendix 1, boxes 1 and 2 in the final report⁶) was that LSW leads to interactions between care staff and family members (*causal link*), thus strengthening understanding of, and the relationship with, family members (*outcome*).

Others theories were much more complex, and sometimes argued two separate final outcomes from the same causal chain. For example, concluding theory 24 (final outcomes in bold) was:

- 24: LSW enables staff to gain a fuller and more dynamic picture of person with dementia which
 - 24.1: increases their knowledge of the person (causal link), which
 - 24.1.1: enables them to find out more about a person's needs and behaviour (outcome);
 - 24.1.2: helps staff see the person in context of their whole life rather than in terms of their medical condition/physical needs (outcome);
 - 24.1.3: provides a talking point between staff and the person with dementia

(causal link), which

24.1.3.1: helps develop a common bond between the person with dementia and staff (outcome)

Here we see an intermediate outcome (24.1) that led to two final (24.1.1 and 24.1.2) and one further intermediate outcome (24.1.3), which led itself to a further final outcome (24.1.3.1). Despite the complexity, overarching or common final outcomes were evident. In the The next stage of analysis we identified these and synthesised the causal links that the literature suggested led to them. Here we included only outcomes that at least four papers identified as resulting from LSW. This was an entirely pragmatic decision; with only 16 publications to draw on, setting a criterion of around a quarter that argued a similar chain between intervention and outcome offered at least some possibility of a secure security of message from the analysis.

Then, within each outcome, we included only theories where at least two studies had argued that the same or similar causal links led to these outcomes. Again, this was a pragmatic decision.

In total, we identified six overarching outcomes and 12 theories, derived from 16 different papers.

The overarching final outcomes (in bold) for the person with dementia were:

- 1. **LSW supports the self-worth and empowerment of people with dementia**, for example by increasing a sense of control, pride in their lives and opportunity for reciprocity.²⁷⁻²⁹
- 2. LSW affects a range of psychological individual outcomes positively, for example reducing anxiety, depression, agitation, mood and behaviour. ^{13 30 27 31 32 33, 34 35 28, 36}

Final outcomes in relation to the care setting were:

- 1. LSW improves relationships between care staff and the individual person with dementia. 10, 30, 35, 37
- 2. **LSW leads to better care**, for example encouraging more person-centred, individualised, less 'pathological' care on a one-to-one basis. ¹³ ²⁹ ³⁰ ³⁸ ²⁷ ³⁴, ³⁵, ³⁷, ³⁹

For family members and carers, the final outcomes were:

- 1. LSW allows more effective engagement of family members/carers within the care setting, for example leading to enhanced communication with staff and more meaningful involvement in care planning and delivery. ^{10, 13 38 28, 37}
- 2. LSW helps carers to cope better. ^{38, 40} ²⁸ ^{31, 33}

The models and their links to the overarching outcomes are summarised in figures 2 to 7.

Synthesising the logic model review and material from the qualitative work

We shared the results of both the review and the focus groups qualitative work with our steering and advisory groups, the partner organisations hosting the feasibility study, and with specialist advisor Professor Esme Moniz-Cook, lead author of the INTERDEM European consensus document on outcome measures for psychosocial intervention research in dementia care ⁴¹. There was general agreement in discussion that the primary overall outcome of interest for people with dementia was quality of life (QoL), albeit that this might be influenced by intermediate outcomes such as the maintenance of skills or feeling understood. Interpersonal outcomes might also influence quality of life; impact on relationships, in particular, was felt to be worth exploring as an outcome in its own right, along with impact on identity.

QoL was also agreed to be a primary outcome for carers, with impact on relationships and satisfaction with care also-important.

Staff approaches to care, both in terms of person-centred care and perceptions in terms of both person-centred care and perceptions of service users with dementia, might also have an impact on QoL, whether though individual outcomes or changes to care routines. We also hypothesised that improvements to care might influence staff burnout.

Table 4 presents the outcomes we agreed to include in the feasibility study. As this suggests, this choice took some of the final outcomes from the review to a further stage of abstraction. For example, for people with dementia, increased self-worth and reduced 'negative' psychological and behavioural outcomes were translated into 'quality of life'. Similarly, enhanced coping for carers was subsumed into a general assessment of quality of life.

In other cases, intermediate outcomes in the theories from the review – for example, perceptions of clients with dementia, and person-centred approaches to care that might lead to 'better care' for the person with dementia – were adopted as final *staff* outcomes for the feasibility work.

One outcome from the review that did not feature in the chosen outcomes was engagement with family members/carers in the care setting. Conversely, an outcome from the qualitative research work that did not feature in its own right in the theory review was an enhanced sense of identity for the person with dementia.

Discussion

A possible problem of searching for theoretical papers within the results of an existing systematic review is, as Campbell et al have argued, that the inclusion and exclusion criteria may exclude publications that 'provide detailed theoretical discussions without presenting

empirical data' p.6.¹⁶ Our wide approach to searching, by including anything that might throw light onto the theoretical underpinnings of LSW, avoided this issue. Despite this, only 168 publications were finally relevant to the theory element.

A further limitation, given the small literature, is the lower likelihood of finding contrasting theoretical accounts. The LSW in dementia field has a relatively small number of actors, with much joint authorship, and the publications showed a high degree of cross-referencing. While we confined our analysis to authors' own argued or implicit theories, not those they were repeating from others' work, shared theoretical commonality across authors is still possible.

The type of review described here, derived from an under-developed literature will, inevitably, depend on reviewers' own formulation and characterisation of 'theory' from what others have written. Given the lack of explicit theory in the papers, the dangers of over-interpreting the text are obvious. However, we have provided a worked example of our analysis, and our data extraction tables are freely available, as are the mind maps that drove the final synthesis, thus allowing others to judge whether our conclusions are warranted.

Triangulation of findings from the review and the qualitative research showed a high degree of commonality in the outcomes identified that the review and the qualitative work identified, albeit with some variation in whether they were defined as identified as final or intermediate outcomes. The review identified one outcome absent from the qualitative work, related to involving family members or carers in care settings. This probably reflects the number of publications in the theory review that were about LSW in long-term care settings. Similarly, the qualitative work identified one outcome – enhancing personal identity for the person with dementia - that did not feature in its own right in the review. However, the intermediate outcomes of self-affirmation and pride and of an increased sense of control or power for the person with dementia that the review *did* identify might imply an enhanced sense of identity.

In areas of When health and social care that interventions are both under-theorised and underresearched, but already widely used, our approach may offer a more rapid way of identifying appropriate outcomes for evaluation. A theory review may not be able completely to replace the need for qualitative work with stakeholders. However, if our theory review had happened before, rather than alongside, the qualitative research work perhaps we could perhaps, have had more focussed discussions with participants about the outcomes they thought might arise from LSW and the related causal pathways. Achieving saturation of the qualitative material might then have been more rapid, allowing both smaller numbers of participants and faster collection and analysis in the qualitative work. Future methodological research could compare these two approaches formally.

A theory review of this type might also create opportunities for improving interventions, allowing practice refinements towards achieving the outcomes that theory suggests are POL. important.

Conclusions

We have described here a way of using a systematic review to elucidate theory in a currently under-theorised area of dementia care. Doing this alongside in-depth qualitative work and validation with stakeholders allowed us to choose outcomes and outcome measures for a feasibility study that mapped clearly onto the derived theories. This approach in other undertheorised areas, of which there are many in health and social care, may enable, post-hoc, the identification and development of identification and development of theory that MRC Guidance on the evaluation of complex interventions mandates,⁴ and perhaps also improvement of to improvement of the interventions themselves.



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Table 1. Inclusion and exclusion criteria

| Inclusion crite | eria | Exclusion criteria |
|-----------------|--|-------------------------------|
| Types of | Studies that included, and papers that | Literature on LSW outside the |
| participants | were about, people with dementia or | dementia/Alzheimer's disease |
| | Alzheimer's disease (including | context. |
| | 'confusion' or 'memory problems') | |
| Phenomena | Studies that evaluated or that threw light | |
| of interest | on the theoretical underpinnings of | |
| | LSW with people with dementia. | |
| Types of | Any outcomes reported for the person | |
| outcomes | with dementia, their informal carers, or | |
| | paid care staff. | |
| Study designs | Any study design, qualitative or | Opinion pieces and letters. |
| | quantitative. | |
| Date | Studies published after 1984. | 7 |
| Language | | Studies not in English. |
| | | |
| | | |

Table 2. Worked example of how analysis uncovered underlying theory from text

| Text | Analysis | Underlying theory |
|--|-------------------------------|---------------------|
| The group that participated in a | The carers' assessment of | LSW that was a |
| dyadic life review (caregiver and | the care receivers' 'problem | shared process |
| care receiver) seemed to gain most | behaviours' improved (final | that was enjoyed |
| from the intervention, particularly in | outcome for family carers) | changed the carers' |
| their assessment of the care | because the dyadic life story | assessment of |
| receiver's problem behaviours. | process was shared (implicit | 'problem |
| Possibly because they were | causal link) and was | behaviours'. |
| enjoying the process simultaneously | enjoyed (implicit causal | |
| and were sharing an event again. ²⁴ | link). | |
| (p.171). | | |

Table 3. Study details: final selection of studies for logic models element of the review

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|---------------------------|---------|----------------|--------------|-----------------|---------------------------|---------------------------|
| | | publication or | | | research | |
| | | study | | | | |
| Batson et al., | UK | Evaluation of | Home/care | 9 | Semi-structured | Health care professionals |
| 2002 ²⁷ | | LSW | home | | interviews | |
| Buron, 2010 ³⁷ | USA | Evaluation of | Nursing home | 5 pwd, 36 staff | Pre-test, post-test staff | Nursing care staff |
| | | LSW | 464 | | individualised care | |
| | | | 4 | 701. | measure | |
| Caron et al., | USA | Description of | Nursing home | At least 12 | - | Not entirely clear but |
| 199938 | | LSW project | | 'biography | 1 | probably care staff and a |
| | | | | groups' of | | facilitator. |
| | | | | family carers | | |
| Chapman et | USA | Evaluation of | Own home | 54 with mild to | RCT (creation of LS | Speech and language |
| al., 2004 ³⁶ | | LSW when in | | moderate AD | book plus drug vs. | therapists/students. |
| | | combination | | | drug + placebo | |

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|--------------------|---------|----------------|---------------|------------------|--------------------------|-------------------------|
| | | publication or | | | research | |
| | | study | | | | |
| | | with Donepezil | | | condition) | |
| Chaudhury, | USA | Evaluation of | Nursing home | 12 pwd and their | 'Short survey' n.o.s. | Not clear but probably |
| 2002 ³⁹ | | LSW | <u></u> | family carers, | | the author. |
| | | | 70/- | plus 12 | | |
| | | | 464 | professional and | | |
| | | | 4 | care staff | | |
| Clarke et al., | UK | Evaluation of | Transitional | 1/0 | Qualitative before and | Support workers in care |
| 200310 | | LSW project | care unit in | | after design, with focus | settings |
| | | | NHS trust and | | groups with staff in | |
| | | | nursing home | | both settings and semi- | |
| | | | | | structured interviews | |
| | | | | | with pwd and family | |
| | | | | | members | |

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|-------------------------|---------|----------------------|----------------|-----------------|-----------------------------|-------------------------|
| | | publication or study | | | research | |
| Damianakis et | Canada | Evaluation of | 10 in own | 12 family | Observation and in- | Family members |
| al., 2010 ²⁸ | | LSW | home, 2 in | members of pwd | depth interviews. | supported by 'multi- |
| | | | long-term care | (6 with | | media biographers and |
| | | | setting | diagnosed AD | | social workers' |
| | | | 464 | and 6 with | | |
| | | | | diagnosed MCI) | | |
| Egan et al., | Canada | Evaluation of | Long-term | 4 pwd and all | Single subject, | Research assistants |
| 2007 ³² | | LSW | care settings | staff who | repeated measures | |
| | | | | worked with | design logging | |
| | | | | them. | aggressive behaviours, | |
| | | | | | plus interviews with | |
| | | | | | staff. | |
| Gibson et al., | UK | Evaluation of | Residential | 30 pwd, 14 care | Pilot study using pre- | Not entirely clear. One |
| Gibson et al., | UK | Evaluation of | Residential | | plus interviews with staff. | Not entirely clear. On |

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|--------------------|---------|----------------|---------------|-----------------|-------------------------|--------------------------|
| | | publication or | | | research | |
| | | study | | | | |
| 2006 ³⁴ | | LSW | care setting | staff | test, post-test design | part of chapter mentions |
| | | | | | and control group. | family members (p. 128), |
| | | | 6 | | Range of standardised | but rest of chapter is |
| | | | 70/2 | | measures. | about care staff. |
| Hagens et al., | Canada | Evaluation of | Nursing home | 5 people with | Participant observation | Authors |
| 2003 ³⁰ | | LSW project | 4 | confirmed | and interviews with | |
| | | | | cognitive | two residents. | |
| | | | | impairment | V | |
| Haight et al., | USA | Evaluation of | Not clear but | 22 pairs of pwd | Pre-test, post-test | Not entirely clear but |
| 2003 ³³ | | LSW when | appears to be | and family | comparing LSW with | seems that authors |
| | | done with and | in own home | carers | and without | worked with pwd and |
| | | without family | of pwd | | involvement of family | carers. |
| | | carer | | | carer, and a control | |

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|-------------------------|-----------|-----------------|-------------|-----------------|-------------------------|--------------------------|
| | | publication or | | | research | |
| | | study | | | | |
| | | | | | condition. | |
| Morrow- | USA | Description and | Nursing | - | - | Professional facilitator |
| Howell et al., | | 'field testing' | homes | | | and family members |
| 1997 ⁴⁰ | | of LSW | 70/- | | | |
| Kellett, | Australia | Evaluation of | Residential | 7 family | Qualitative pilot study | Family members and care |
| Moyle, | | LSW | care | members, 7 care | using focus groups | staff facilitated by |
| McAllister, | | | | staff | with participants | researcher |
| King, & | | | | | 1 | |
| Gallagher, | | | | | | |
| 2010 ¹³ | | | | | | |
| McKeown et | UK | Evaluation of | NHS in- | 4 pwd, their | Multiple case study | Author facilitated. |
| al., 2010 ²⁹ | | LSW | patient and | family carers | design. Semi- | |
| | | | day care | and care staff. | structured interviews, | |

| Study | Country | Type of | Setting | N involved | Methods used, if | Who delivered LSW? |
|--------------------|---------|----------------|---------------|-----------------|-----------------------|--------------------|
| | | publication or | | | research | |
| | | study | | | | |
| | | | settings | | observation and | |
| | | | | | conversation. | |
| Murphy, | UK | Description of | _ | - | - | - |
| 2000 ³⁵ | | LSW and guide | 10/ | | | |
| | | to practice | 46h | ۵ | | |
| Yasuda et al., | Japan | Evaluation of | Memory clinic | 15 memory | Experimental ABCA | Authors |
| 2009 ³¹ | | LSW | | clinic out- | design, with TV | |
| | | | | patients with | programmes as control | |
| | | | | probable | conditions. | |
| | | | | diagnosis of AD | | |

AD – Alzheimer's disease

MCI – mild cognitive impairment

LS/LSW – Life story/life story work

NHS – National Health Service (UK)

PWD – person living with dementia



Table 4: Outcomes identified for feasibility study

| Outcome chosen | Outcome for |
|---------------------------------|----------------------|
| Wellbeing/ QoL | People with dementia |
| | Carers |
| Relationships (person with | People with dementia |
| dementia/carer) | |
| | Carers |
| Identity | People with dementia |
| Overall satisfaction with care | Carers |
| Perception of clients with | Staff |
| dementia | |
| Person-centred approach to care | Staff |
| Staff satisfaction and | Staff |
| strain/burnout | O. |
| | 7 |

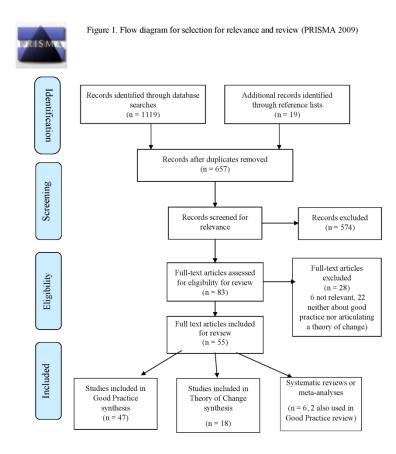


Figure 1. PRISMA diagram 210x296mm (250 x 250 DPI)

Figure 2. Theories of change for increased self-worth of person with dementia

| Study | First link | Second link | Third link | Final outcome |
|---|---|----------------------------------|------------|--------------------------|
| Batson ²⁷ Hagens ²⁸ | Being listened to/ opportunity to share self with staff | Increased sense of control/power | - | Increased self- worth |
| Damianakis ²⁶ McKeown ²⁵ | Being valued and recognised | Self-affirmation and pride | - | worth |
| | | | | |

Figure 2

210x296mm (250 x 250 DPI)

Figure 3. Theories of change for improved individual outcomes for person with dementia $\,$

| Study | First link | Second link | Final outcome |
|---|--|--|---|
| Egan ³⁰ Kellett ⁴⁰ Hagens ²⁸ | Increased staff knowledge of, and interaction with, person with dementia | Facilitates more person-centred or individualised care | Reduced 'negative' |
| Chapman ³³ Haight ²³ Gibson ³² Yasuda ²⁹ | Person with dementia is engaged in/enjoys the LSW process | - | psychological and behavioural outcomes |

Figure 3 210x296mm (250 x 250 DPI)

Figure 4. Theories of change for improving relationships between staff and the person with dementia $\,$

| Study ID | First link | Second link | Final outcome |
|--|--------------------------------------|--|---|
| Murphy ³¹ Clarke ¹⁰ Hagens ²⁸ | Get to know the person with dementia | Improve interaction and communication | Improve relationships between staff member |
| Chaudhury ³⁶ Clarke ¹⁰ | | Understand current actions and behaviour | and person with dementia |
| _ | | | |

Figure 4 210x296mm (250 x 250 DPI)

Figure 5. Theories of change for improving care

| Study ID | First link | Second link | Third link | Final outcome |
|---|--|--|---|----------------|
| Chaudhury ³⁶ Gibson ³² Kellett ⁴⁰ McKeown ²⁵ Murphy ³¹ | Increases staff understanding of the person with dementia | Enables staff to 'see' the person with dementia/ makes the person with dementia 'knowable' | Facilitates more person-centred or individualised care | |
| Batson ²⁷ Buron ³⁴ Chaudhury ³⁶ Murphy ³¹ Hagens ²⁸ | Increases staff knowledge about the person with dementia | Improves 'fit' between care provided and person with dementia's needs/interests | Improves overall care | Better care |
| Buron ³⁴ Chaudhury ³⁶ | Increases staff knowledge about the person with dementia | Changes aspects of the 'job' and staff behaviour | environment | |

Figure 5

210x296mm (250 x 250 DPI)

Figure 6. Theories of change for more effective engagement of family/members in care setting

| Study ID | First link | Second link | Finaloutcome | | |
|--|---|---|--|--|--|
| Caron ³⁵ Damianakis ²⁶ Kellett ⁴⁰ Chaudhury ³⁶ Chapman ³³ | [Carer-led or focussed LSW] improves recognition and empowerment of family member/carer in care setting [Staff-led LSW] leads to more interaction and involvement with family members/carers | More inclusive relationship between family member/carer and care setting with care planuing and delivery Care staff have more knowledge and understanding of family members/carers of people with dementia | More effective engagement with family members/carers in care setting | | |
| | | | | | |

Figure 6

152x215mm (300 x 300 DPI)

Figure 7. Theory of change for helping family members/carers to cope better

| Study ID | Firstlink | Second link | Final outcome |
|---|---|--|--|
| Caron ³⁵ Damianakis ²⁶ Morrow- Howell ³⁷ | Enables carer to remember past life of person with dementia | Changes family members/carers' appraisal of person with dementia and their current condition | Enhances coping of various types |
| _ | | | |

Figure 7 152x215mm (300 x 300 DPI)