



REVIEW

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An evaluation of the role of social identity processes for enhancing health outcomes within UK-based social prescribing initiatives designed to increase social connection and reduce loneliness: A systematic review

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Abstract

The UK's National Health Service has introduced Social Prescribing initiatives to tackle loneliness and ill-health, yet it lacks a theoretical foundation and evidence base for Social Prescribing's effectiveness. Recent research applies the Social Identity Approach to Health (SIAH) to explain Social Prescribing's health benefits, emphasising how social connection unlocks health-enhancing psychological mechanisms. This systematic review therefore aims to assess UK-based Social Prescribing programmes designed to boost social connection and alleviate loneliness, examining programme efficacy and the role of SIAH processes in health outcomes. Following PRISMA guidelines, a narrative synthesis of articles published from May 5, 2006 (when social prescribing was first introduced in the NHS), to April 8, 2024, was conducted, and their quality assessed using CONSORT-SPI (2018). Of these programmes, 10 employed a mixed-methods design, 8 qualitative and 1 quantitative service evaluation, totalling 3,298 participants. Results indicate that

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Social Prescribing's psychological value lies in quality rather than quantity of social connections, with meaningful connections fostering shared identity, perceived support and self-efficacy, the latter of which sustains social engagement post-programme. The SIAH was a useful tool for mapping mixed-methods findings onto a common theoretical framework to highlight these key proponents. Overall, this review underscores the importance of SIAH-informed Social Prescribing interventions in enhancing social connectedness, reducing loneliness, and promoting overall health. Please refer to the Supplementary Material section to find this article's [Community and Social Impact Statement](#).

KEYWORDS

health, interventions, loneliness, social identity approach to health, social prescribing

1 | INTRODUCTION

Increasing demand for healthcare and a £30 billion funding gap led the UK's National Health Service (NHS) to set out their 5-Year Forward View to address how the UK's health was going to be managed just under a decade ago (Ham, 2017; NHS, 2014; also see MacIntyre & Hewings, 2023, on government strategies for tackling loneliness). Within this, they emphasised the need for increased preventative approaches and self-supported care to tackle the rising number of health inequalities and long-term health conditions, the latter of which consumed 70% of the NHS's budget. To achieve this, the NHS proposed to adopt longer-term sustainable programmes that acknowledge how social and economic deprivation increase the incidence of ill-health. Preventable illnesses such as obesity and mental health conditions, where loneliness is a root cause, were felt to be a particular priority, and a call for evidence-based action and preventative services was recommended. However, 2014 was not the first time that the NHS highlighted the necessity of focussing on socio-economic predictors of ill-health. In 2006, the Department of Health advocated for the introduction of Social Prescribing as an integral part of NHS care to help with the management of long-term illness (Department of Health, 2006). The Social Prescribing model was developed to increase NHS sustainability, as well as the availability of holistic support for the UK population (NHS, 2019).

1.1 | Social prescribing

Social Prescribing is a non-clinical healthcare initiative where health professionals connect their patients to community groups and activities (e.g., arts programmes, health walks, horticulture groups and supported education) with the intention of improving their health and wellbeing by reducing loneliness and increasing illness self-management and social integration (Haslam et al., 2024; Hayes et al., 2023; NHS, 2019). Important to note is that early models of Social Prescribing in the United Kingdom were largely seen as a way of providing holistic healthcare. However, following the advent of the loneliness epidemic (Ng, 2024), particularly following the COVID-19 pandemic, and the publication of early work demonstrating how loneliness reduction is a mediating process through which Social

Prescribing improves wellbeing, the utility of Social Prescribing for specifically addressing loneliness is being increasingly recognised.

Dependent on the clients established needs, the focus of Social Prescribing and the subsequent nature of the intervention may differ. Haslam et al. (2024) identify three tiers of Social Prescribing: (a) Community focus with community-level initiatives that are often incidental (e.g., a library or community garden); (b) Targeted populations (e.g., those with mental health conditions) with specific group programmes (e.g., a choir or community exercise programme); and (c) A focus on individual clients with person-centred interventions. These are often purposive where a Link Worker (who aims to holistically understand client needs) directs the client to most suitable social prescription and supports them through this process to facilitate their introduction to, and continued membership of, groups and activities (e.g., Sharman, McNamara, Hayes, & Dingle, 2022). All tiers of Social Prescribing are useful and help researchers and practitioners to identify how best to support clients based on their presenting needs. Importantly, because Social Prescribing strengthens connections between primary care and the voluntary and community sectors, it encourages the development of a more diverse range of local community activities and initiatives. This means that Social Prescribing can be particularly beneficial for marginalised groups whose needs might not have been previously met within local communities, for example, due to access challenges or anxieties around finding and introducing oneself to new groups (e.g., Brandling & House, 2009; Kellezi et al., 2019). Further, this expanded provision of social spaces increases the likelihood of incidental Social Prescribing, where good community connection and reduced loneliness is a natural feature of a well-functioning and connected society (Haslam et al., 2024): an integrated approach to care that maximises social, financial, and educational resources (NHS, 2014) which is beneficial for reducing unnecessary healthcare use and enhancing community health (Wakefield, Bowe, Kellezi, McNamara, & Stevenson, 2019).

1.2 | Social prescribing apprehensions

Although Social Prescribing initiatives have evidenced positive health outcomes (e.g., Carnes et al., 2017; Kellezi et al., 2019; Pescheny, Gunn, Randhawa, & Pappas, 2019; Wakefield et al., 2020), many argue that enthusiasm is premature (Dayson, 2017; Husk et al., 2019). In part, this is reflective of the implementation challenges experienced by Social Prescribing providers with several outstanding questions for service delivery. For example, what is the capacity needed by NHS services to run Social Prescribing initiatives alongside current health provisions? (Westlake, Tierney, Wong, & Mahtani, 2023). This begins by understanding how Social Prescribing is distinct from other existing healthcare services while also comprehending how it can fit within, and complement, current health systems (Westlake et al., 2023). Unfortunately, many primary care providers are still at the early stages of understanding how Social Prescribing is distinct (Westlake et al., 2023), limiting their time to think about the formats and pathways through which they can deliver Social Prescribing services that draw on existing resources and therefore reduce the capacity needed to run them. Having this understanding would be advantageous given funding and resource challenges within the NHS as well as a push for more sustainable programmes (NHS, 2019). However, the reality is that many Social Prescribing services are delivered without thought to this, limiting beneficial outcomes as well as researcher's ability to conduct robust evaluations.

Another consideration relates to for whom, and in what context, Social Prescribing is favourable over other health and social interventions. For instance, personality dispositions may impact one's engagement with, and the health benefits obtained from, Social Prescribing participation. Whilst present research is lacking in this domain, there is research to suggest that one's enjoyment in social life is heightened if they are an extrovert in comparison to introverts (Newton, Pladevall-Guyer, Gonzalez, & Smith, 2018). Consequently, the uptake and effectiveness of Social Prescribing among introverts may be limited.

Another reason enthusiasm for Social Prescribing is deemed premature relates to the inconsistent evidence base (Dayson, 2017; Husk et al., 2019). Consequently, there is a need for evidence at all stages of the intervention

(e.g., the pathway level; Husk et al., 2019). Indeed, guidelines for developing new healthcare interventions highlight the importance of conducting systematic reviews to ensure that all current aspects of the intervention (and any future developments) are evidence-based (Kunisch, Denyer, Bartunek, Menz, & Cardinal, 2022). Within medicine and the social sciences, such approaches are integral where the impact of health interventions can be widespread (e.g., on public health and policy) and thus there is an impetus to minimise bias within treatment protocols (Kunisch et al., 2022). However, despite Social Prescribing becoming increasingly more common in the United Kingdom (Bickerdike, Booth, Wilson, Farley, & Wright, 2017), research (including systematic reviews) has been unable to reliably establish the health-enhancing processes that underlie Social Prescribing and thus articulate gold standard Social Prescribing protocols to achieve consistent benefits for improving health outcomes. The fact that the NHS 5-year Forward View (NHS, 2014), and its subsequent review (NHS, 2017) highlighted the urgent need for evidence-based action within the social sphere makes this lack of evidence a concern.

2 | DIFFICULTIES ESTABLISHING SOCIAL PRESCRIBING EFFICACY

Difficulties in establishing Social Prescribing efficacy, in part, stem from the limited coherent synthesis of Social Prescribing findings; synthesis which is necessary to understand what parts of Social Prescribing are effective and what parts need further development. However, variation within Social Prescribing programmes, both in terms of their definition and design, makes it difficult to compare outcomes in a meaningful way (i.e., identifying for whom, and under what circumstances Social Prescribing is helpful, for example, Bickerdike et al., 2017; Husk et al., 2019). For example, and as highlighted prior, Haslam et al. (2024) identify three tiers of Social Prescribing, each with different purposes and subsequent interventions. To complicate matters further, Kimberlee (2015) outlines four different formats of referral into, and evaluation of, Social Prescribing programmes: (a) signposting; (b) light; (c) medium and (d) holistic (Kimberlee, 2015; also see Husk et al., 2019; Moore, Unwin, Evans, & Howie, 2022 for more recent use of these groupings). Each of these have different levels of primary care involvement and evaluative processes. For example, *signposting* Social Prescribing (comparable to Haslam et al.'s (2024) Tier 1) involves service users autonomously accessing support services (e.g., a community cooking group), and includes minimal evaluation of service outcomes (e.g., asking participants if they enjoyed the group activity). By comparison, *light* or *medium* Social Prescribing (Comparable to Haslam et al.'s (2024) Tier 2), which tend to be the most common types of Social Prescribing services, involve referring service users to specific programmes designed to achieve a specific objective with distinct outcome measures (e.g., exercise on prescription). Evaluation may include a short survey at the end of Social Prescribing participation asking participants broadly about their health and wellbeing. Contrasted with these three types of Social Prescribing is *holistic* Social Prescribing (comparable to Haslam et al.'s (2024) Tier 3), which involves a long-term partnership between primary care and voluntary services, the latter of which took an active role in encouraging service users to manage their own conditions, with formal and holistic referrals (i.e., looking at all service user needs beyond the initial reason for their referral; see Kimberlee, 2015), and preventative approaches. Typically, *holistic* Social Prescribing has developed out of evolved Social Prescribing projects that may have previously been defined as *signposting*, *light* or *medium* (Kimberlee, 2015). Evaluation processes may include survey measures related to specific Social Prescribing programme outcomes that are then followed up longitudinally (Kimberlee, 2015).

Given the large variations in Social Prescribing aims, programme design and evaluation of outcomes (e.g., Bickerdike et al., 2017; Costa et al., 2021; Napierala et al., 2022; Percival, Newton, Mulligan, Petrella, & Ashe, 2022), it is evident how a meaningful evaluation of all Social Prescribing programmes becomes unfeasible. This is because differences in defining the nature of Social Prescribing makes it difficult to decide what constitutes a good evidence base that captures the complexities of the service (Husk et al., 2019). For example, long-term follow-up with non-holistic forms of Social Prescribing become impractical if there is no supported form of contact with service users over time. Thus, without good infrastructure, the capacity of organisations making Social Prescribing referrals

is limited when it comes to evaluating programme efficacy in meaningful ways to achieve a robust evidence base (Husk et al., 2019).

Further, extant systematic reviews have not utilised a common framework to synthesise available Social Prescribing evidence as these guidelines have only recently been established (e.g., see Cunningham, Rogowsky, Carstairs, Sullivan, & Ozakinci, 2023 for newly developed guidelines on synthesising Social Prescribing findings). This has led to a lack of good quality systematic reviews, which are the gold standard for understanding and improving healthcare interventions (Kunisch et al., 2022), needed to effectively facilitate understanding of Social Prescribing's benefits and of how different types of Social Prescribing designs may achieve different outcomes among different groups. In light of their observations, authors such as Bickerdike et al. (2017) emphasise the need for focused and standardised evaluations of Social Prescribing, which are more likely to shed light on how Social Prescribing works, for whom, and in what contexts (Bickerdike et al., 2017).

2.1 | Applying the social identity approach to health to social prescribing

Limiting evaluation of Social Prescribing initiatives further is the lack of theoretical framework that is adopted when interventions are designed and evaluated (Bickerdike et al., 2017; Evers, Husk, Napierala, Wendt, & Gerhardus, 2024). This has restricted researchers' ability to hypothesise what led to beneficial change following Social Prescribing participation because the function of groups is not fully understood, and outcome measures that would capture these processes are not utilised (Bickerdike et al., 2017; Stevenson et al., 2019). Underpinning Social Prescribing initiatives with a theoretical framework would aid in identification of the active mechanisms within Social Prescribing that lead to the beneficial health outcomes observed and allow these to be replicated across all Social Prescribing interventions in a consistent manner (Stevenson et al., 2019). It would also allow specific outcome measures to be employed to capture these active mechanisms rather than broadly assessing health and wellbeing as have been previously observed (Thomson, Morse, Elsdon, & Chatterjee, 2020; Venter & Buller, 2014; Vogelpoel & Jarrold, 2014). Although some interventions may employ logic models to understand behaviour change mechanisms (Mills, Shannon, O'Hara, Lawton, & Sheard, 2022), we emphasise the importance of comprehensive theoretical models here. This is because logic models describe a series of sequential and linear steps. However, it is common for social interventions to have non-linear effects (Iancu & Lanteigne, 2020); non-linear processes which can be better captured through testing theoretical models (e.g., through Structural Equation Modelling) to better isolate and evaluate the contribution of each component of the theoretical model for the success of the intervention. While an established theoretical framework does not yet exist for Social Prescribing, recent work has identified 11 distinct theories that have been used to understand Social Prescribing outcomes (Salutogenesis; Self-Determination Theory; Social Cure; Social Innovation), differences in outcomes (Bourdieu's theoretical concepts; Time & Synchronicity; Candidacy), and service implementation (Boundary Spanners; Critical Systems Thinking; Normalisation Process Theory; Social Capital; see Evers et al., 2024). Importantly, this work has begun to highlight the complexity of using theory for Social Prescribing implementation and evaluation, with all but one theory (Candidacy; Mercer et al., 2017) suggested to be helpful for understanding what leads to beneficial outcomes following Social Prescribing participation. This demonstrates how identification and conceptualisation of the active mechanisms within Social Prescribing is not clear-cut. Rather, there are different aspects of Social Prescribing programmes (e.g., health outcomes, differences in outcomes, and service delivery) that need to be guided by theory, and this theory may be different for each aspect, or require a combination of theories to best explain outcomes observed (Evers et al., 2024).

However, one challenge with the aforementioned theoretical work is the lack of transparency regarding how theory was used to inform different aspects of the Social Prescribing programmes. Specifically, Evers et al. (2024) highlight: (a) Inadequate descriptions of theories used; (b) reporting of results that are detached from their theory; and (c) challenges with the practicality for adopting and operationalising these theories to improve service delivery.

Nonetheless, one theory was able to conceptualise key process variables into operationalised, quantitative outcomes which are essential for healthcare service implementation (Guetterman, 2019): Social Cure.

The Social Cure is a branch of the Social Identity Approach to Health (SIAH), and recent work has begun to conceptualise Social Prescribing using this theoretical approach (SIAH; Haslam et al., 2024; Haslam, Jetten, Cruwys, Dingle, & Haslam, 2018; Stevenson et al., 2019). The SIAH posits that group identification (i.e., a subjective sense of group belonging) unlocks valuable psychological mechanisms (e.g., social support, sense of meaning in life, sense of personal control; Jetten et al., 2017; Wakefield et al., 2019), which in turn benefit health and wellbeing. Recent research has demonstrated that these processes are active within Social Prescribing programmes (see Kellezi et al., 2019; Wakefield et al., 2020). For example, they highlight not only that Social Prescribing participation increases quality life, but that this relationship is serially mediated by belonging, social support and loneliness (Wakefield et al., 2020). Thus, Social Prescribing enhances health through SIAH mechanisms (see Figure 1). Therefore, review of existing Social Prescribing initiatives through a SIAH lens will contribute toward developing an evidence base that begins to identify the active ingredients of Social Prescribing, and a potential focal point for future Social Prescribing programmes.

2.2 | The current systematic review

Given the lack of theoretical underpinning in extant systematic reviews of Social Prescribing (e.g., Bickerdike et al., 2017; Reinhardt, Vidovic, & Hammerton, 2014; Steffens et al., 2021), and the aforementioned potential of the SIAH to allow for active mechanisms within Social Prescribing to be established (e.g., Kellezi et al., 2019; Wakefield et al., 2020), the current review applies the SIAH to explore its utility for understanding the psychological processes that lead to beneficial outcomes following Social Prescribing participation. Further, in comparison to other systematic reviews in this area that have a broad focus on the extent to which all types of Social Prescribing initiatives benefit general health and wellbeing (e.g., Bickerdike et al., 2017; Costa et al., 2021; Napierala et al., 2022; Percival et al., 2022), the current systematic review synthesises evidence from Social Prescribing programme evaluations that specifically consider social connectedness, belongingness and loneliness within their study design (e.g., Thompson, Holding, Haywood, & Foster, 2023). While Social Prescribing generally is designed to improve health and wellbeing through increases in social support, a focus on increasing social connectedness is not always explicitly identified and included within evaluation protocols. As such, concentrating on the subset of Social Prescribing programmes that do consider these constructs (i.e., are focused on increasing social connectedness and reducing loneliness) will allow the review to identify and categorically explore the presence of SIAH mechanisms within Social Prescribing. In addition,

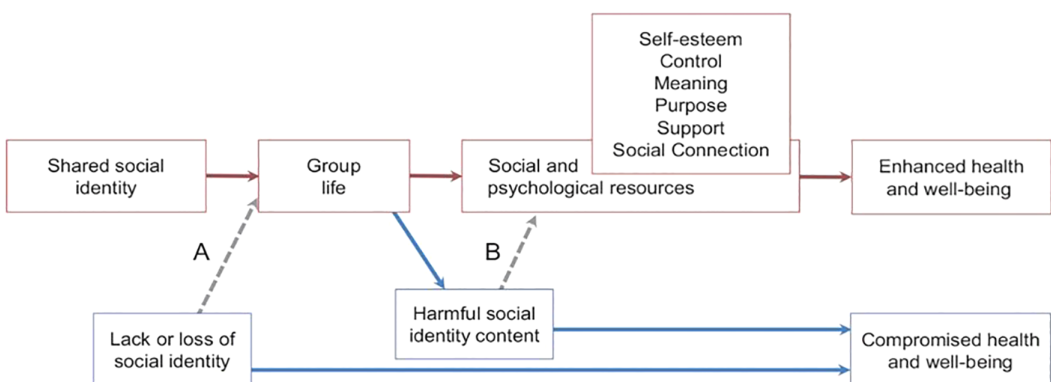


FIGURE 1 Application of SIAH mechanisms to social prescribing taken from Haslam et al. (2024).

it will allow the systematic review to understand the extent to which (and the psychological process through which) these initiatives predicted *actual* increases in social connection and reductions in loneliness, as well as the extent to which they predicted enhanced health and wellbeing.

While a handful of existing reviews have specifically explored Social Prescribing programmes designed to address loneliness and social connectedness (Liebmann, Pitman, Hsueh, Bertotti, & Pearce, 2022; Reinhardt et al., 2014; Steffens et al., 2021; Vidovic, Reinhardt, & Hammerton, 2021), these authors did not ground their reviews within a theoretical framework such as the SIAH. This has prevented researchers being able to establish the mechanisms that predict/produce beneficial change within Social Prescribing programmes designed to reduce loneliness (Stevenson et al., 2019). Furthermore, while Evers et al. (2024) have conducted a review of theories informing Social Prescribing which beneficially identified how theories utilised (of which the SIAH was one) impacted choice of outcome measures and begun to provide a theoretical basis for Social Prescribing, the nature of their review limits their theorising to those theories identified by the respective authors of articles included. Thus, it does not provide the opportunity to explore in depth the presence of theoretical mechanisms within the work that may not have been identified by the respective authors themselves; alternative theories that may offer a better explanation for the health benefits observed as a result of Social Prescribing participation. In addition, Evers et al. (2024) only included Social Prescribing Programmes that employ link workers. This limits our understanding of the theoretical mechanisms that underpin Social Prescribing to holistic Social Prescribing programmes. Thus, instead, the present review not only offers an opportunity to identify active psychological mechanisms within largely atheoretical work, but it also allows us to understand how theory may be applied to a broader range of Social Prescribing formats (e.g., signposting, light and medium Social Prescribing); a necessity identified by Evers et al. (2024) themselves. To summarise, this will be the first review of Social Prescribing initiatives that is underpinned by the SIAH: as well as being theoretically novel, this review will enhance understandings of how best to design, implement, and evaluate Social Prescribing initiatives (Bickerdike et al., 2017).

To further refine this review in light of previously identified limitations (e.g., Bickerdike et al., 2017), only UK-based Social Prescribing programmes were included in the evaluation as: (a) different countries have qualitatively and quantitatively different healthcare systems and community resources, and (b) Social Prescribing aims to identify and address different social and environmental factors that impact wellbeing (McIntosh, Stewart, Forbes-McKay, McCaig, & Cunningham, 2016; Sonke et al., 2023), and these will differ across countries. The review thus required clearly defined geographical boundaries to be focused, and to enable meaningful conclusions to be drawn and recommendations to be made.

In sum, this systematic review aims to: (a) identify UK-based Social Prescribing initiatives that are primarily designed to increase social connection and reduce loneliness (as well as to benefit general health and wellbeing), (b) explore the extent to which the reviewed Social Prescribing initiatives predict/cause increased social connection, reduced loneliness, and improved health and wellbeing, and (c) apply the SIAH to shed light on the psychological processes at work in the reviewed Social Prescribing programmes.

3 | METHOD

3.1 | Design

After selecting articles for evaluation based on the pre-determined inclusion/exclusion criteria defined below, a formal narrative synthesis was conducted to enable exploration of the psychological mechanisms active within Social Prescribing programmes that aim to enhance social connectedness and reduce loneliness (as well as the health and wellbeing-related outcomes of these programmes). The synthesis was informed by evidence-based guidance that focuses on enhancing Social Prescribing through conducting robust evaluation (see Cunningham et al., 2023). This involved analysing the data from each study included in the systematic review to ascertain common themes.

Narrative synthesis (unlike meta-synthesis) allows for the combining of qualitative and quantitative data, which provided a deep and rich exploration of the psychological mechanisms that may be producing health and wellbeing-related outcomes among people involved in Social Prescribing programmes that are designed to enhance social belongingness and reduce loneliness (Snilstveit, Oliver, & Vojtkova, 2012). A narrative synthesis is appropriate given variations in current Social Prescribing evaluative research design that may otherwise have hindered formal quantitative or qualitative data synthesis. In particular, the limited number of evaluations of Social Prescribing initiatives that are specifically designed to reduce loneliness and/or increase social connection, coupled with poor reporting of existing interventions in this area, means there was limited scope for meta-analysis (quantitative synthesis).

3.2 | Inclusion/exclusion criteria

Inclusion criteria for article selection encompassed Social Prescribing intervention trials as well as both qualitative and quantitative reports pertaining to Social Prescribing programmes that aimed to reduce loneliness and/or increase social connectedness in their programme definition.¹ Qualitative papers that outlined a want or need for Social Prescribing, or a general response to Social Prescribing were excluded. Instead, any qualitative articles included in the systematic review had to be linked to an established and specified Social Prescribing programme so the review could identify, and evaluate, features of the Social Prescribing programme (i.e., type of Social Prescribing, target population, duration, etc.) that may have produced the outcomes observed. Qualitative reports can be helpful for identifying active mechanisms within interventions that produce beneficial change because they allow richer exploration of Social Prescribing experiences beyond pre-defined quantitative measures (e.g., Warren et al., 2020). All population groups within the United Kingdom were included, but studies conducted outside of the United Kingdom were excluded to eliminate the impact of geographical differences (e.g., disparate healthcare systems, community resources and environmental factors) that may impact health and wellbeing outcomes.

Social Prescribing programmes that did not explore their effectiveness in relation to reducing loneliness and increasing social connectedness were also excluded to ensure a focused review as the broad focus of previous systematic reviews has been identified as a limitation (Bickerdike et al., 2017). Articles had to be written in English, and had to have been published between May 5, 2006 (when the Department of Health released a report advocating for the introduction of Social Prescribing within the NHS) and April 8, 2024 (when the last search was conducted).

Given the large variations in how Social Prescribing is both defined and delivered, Social Prescribing was deliberately defined in very general terms for this review: the process by which primary care, or some form of statutory or clinically commissioned service, connects people to community groups and organisations. This is in comparison to other reviews in this area which have necessitated the involvement of a Link Worker for a programme to be defined as Social Prescribing (e.g., Bickerdike et al., 2017; Evers et al., 2024; Morse et al., 2022). This definition also better aligns with established consensus set out by Muhl, Mulligan, Bayoumi, Ashcroft, and Godfrey (2022). While the role of the Link Worker is not to be underestimated, the exact nature of how the Social Prescribing programmes were delivered was not the focus of this review.

3.3 | Search strategy

The search strategy was discussed and refined by the research team, drawing specifically on knowledge from an expert (JW) in Social Prescribing literature. The protocol was pre-registered on PROSPERO (registration number: CRD42023427377), and PRISMA guidelines were used to conduct the review (Moher et al., 2009). The following databases were systematically searched using the search terms (('Social Prescri*' OR 'Social Cure' OR 'Non-Medical Prescribing') AND ('Social Connect*' OR Connect* OR Lonel* OR Wellbeing OR Belong*) AND (UK OR England OR Wales OR Northern Ireland OR Scotland)): Applied Social Sciences Index (ASSIA); Nursing and Allied Health

Literature (CINAHL); Social Care Online (SCIE); MEDLINE; APA PsycArticles & PsycINFO through APA PsycNet; Cochrane Database of Systematic Reviews; Cochrane Central Register of Controlled Trials; PubMed; Scopus.

3.4 | Screening, data extraction and synthesis

Titles and abstracts were screened by the lead author to identify studies that met the inclusion criteria. Following this, articles that met the inclusion criteria were downloaded and the full texts were reviewed by the lead author to determine inclusion in the systematic review (see Figure 2). Extracted data were collated in an Excel spreadsheet. This initial extraction of key information from articles was conducted by the lead author, cross-checked by the final author and discussed with the rest of the research team.

3.5 | Narrative synthesis

Data extracted are presented in Table 1. This includes the type of intervention (e.g., signposting, light, medium, holistic Social Prescribing), context (e.g., location and setting of Social Prescribing programme), timing (e.g., length of Social Prescribing programme, follow-up engagement), and target demographic. This enabled systematic exploration of how these variables are associated with health and wellbeing-related outcomes (see Table 1). Specific outcomes of interest for this review pertained to loneliness and social connectedness. Notes were also taken in relation to any discussion of theoretical underpinnings of Social Prescribing, although such discussion was anticipated to be limited due to Social Prescribing being evaluated in largely atheoretical ways. Extraction of this information aided in the identification of SIAH processes at work in Social Prescribing programmes, as well as what variables may increase the likelihood of such processes occurring.

Following this preliminary synthesis, relationships between different variables were explored (i.e., is the effectiveness of Social Prescribing dependent on whether the focus is on isolation reduction or enhancing social connectedness?). During this stage, care was taken to acknowledge how methodological differences between studies may affect outcomes.

3.6 | Quality assessment

CONSORT-SPI 2018 (a tool developed for transparent reporting of social and psychological interventions; Grant et al., 2018) was used to quality assess selected articles (see Supporting Information File A). CONSORT-SPI 2018 additionally provides the scope for simultaneously evaluating both quantitative and qualitative evaluations of complex interventions with a focus on theoretical underpinnings and contextual factors; advantageous over other quality appraisal tools (e.g., QuADS) given the aims of this review. In the current systematic review, articles rated as poor quality were intended to be removed however, given the majority of the included articles were rated as such, it was decided not to implement quality rating as an exclusion criterion. Assessment of article quality was conducted by the lead author, cross-checked by the final author and discussed with the rest of the research team.

4 | RESULTS

Initial searches from all databases yielded 554 results. Of these, 19 articles were included in this review, which reported on 18 different Social Prescribing programmes (see Figure 2 for an outline of article elimination processes);

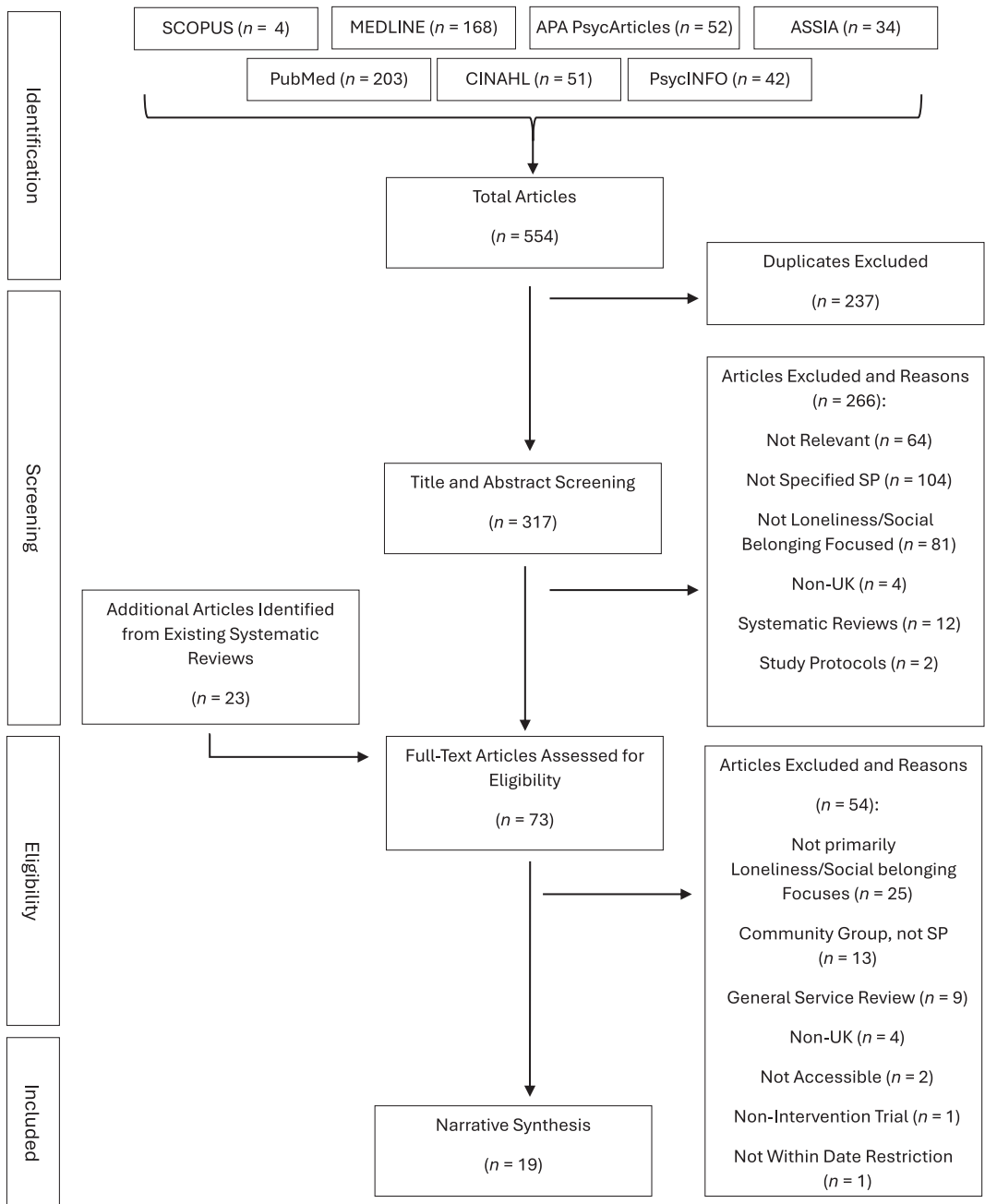


FIGURE 2 PRISMA flow diagram.

two papers reported on the same Social Prescribing programme, but both were included due to having different conceptualisations of the data (Kellezi et al., 2019; Wakefield et al., 2020). The SIAH approach was used to understand and illustrate the interrelationship between different factors that impact Social Prescribing outcomes on domains of loneliness and social connectedness.

TABLE 1 Study Characteristics.

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Cheshire, Richards, and Cartwright (2022)	Qualitative	Survey: Baseline (n = 240), 3-month follow-up (n = 187). Interview and Focus groups: n = 22. <i>M age</i> = 54.	Mild-to-moderate anxiety or depression; social isolation; risk factors for cardiovascular disease; pre-diabetic.	Signposting	Yoga4Health: a 10-week programme of group yoga for all abilities. Each session held max 15 people and were 2 hr each. Sessions consisted of psychoeducation (e.g., deep breathing for relaxation), 1 hr of asana practice, followed by breathing practice, relaxation activities and then finally a group discussion. Home practice was encouraged.	No.	86% completed at least one session after being booked onto the programme.	While participants initially anticipated physical and MH benefits, it was the value of being part of a group and being more connected that really consolidated the benefit observed. Increased social connectedness led to better management of stress, MH and overall wellbeing, where informational, emotional and social support empowered them to take more control over their health.	Qual themes: Motivation to attend Yoga4Health; Perceived benefits of the Yoga4Health programme (Psychological benefits; Physical health benefits; Social benefits; self-management of health and wellbeing); Barriers and facilitators to engagement (Enjoyment and benefits; Suitability of the class; Practising in a group; Yoga teacher skills and relationship; Course materials).	49%
Finn et al. (2023)	Mixed-methods; longitudinal	Qual: 13 Quant: 27 (week 1); 18 (week 4); 14 (week 8). <i>M age</i> = 21.	Young people (aged 16–24) living in the UK with anxiety.	Light.	Online dance classes delivered by Dance Base in response to COVID-19. 16 classes in two separate blocks run weekly across a 2-week period. All classes were facilitated by the same dance practitioner.	No.	33% attrition at 4 weeks, 48% at 8 weeks.	Social cure.	Quant: GAD-7 (Spitzer, Kroenke, Williams, & Lowe, 2006); UCLA-Loneliness Scale (Hughes, Waite, Hawkey, & Cacioppo, 2004); PHQ-2 (Kroenke, Spitzer, & Williams, 2003); SWEMWBS (Stewart-Brown et al., 2009); Self-esteem scale (Robins, Hendin, & Trzesniewski, 2001); General Self-Efficacy Scale (Rommel et al., 2013); Trust in	66%

(Continues)

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Foster et al. (2020)	Mixed-methods; longitudinal.	Qual (n = 50): Service users, volunteers and link workers. Qual follow-up (n = 19): Service users and link workers.	Young parents; health/mobility issues; recently bereaved; retired.	Holistic	British Red Cross and Co-op partnership's national social prescribing services to address rising levels of loneliness. 37 different sites in the United Kingdom. Self and statutory referrals. Paid link-workers provided personalised care for	Yes. Paid link workers.	21.7% only had 1 appointment.	Service users develop a relationship with link workers which is just as beneficial as engagement in SP services. Service users reported this to be central to personalised support specific to their needs. Signposting increased	the Teacher; Inclusion of Other in Self Scale (Aron et al., 1992); One-item group support question; Four-item social identity scale (Doojse et al., 1995); Collective Efficacy (Cruwys, Wakefield, Sani, Dingle, & Jetten, 2018). Qual themes: Co-constructing a shared identity (Alternatives to belonging; Symbols of shared identity; Going through shared experiences; The meaning of the group); Improved holistic wellbeing (Psychological; Physical and bodily; Social; Wider behavioural change; structure and content of the online classes).	51%

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
		Quant (n = 38). 6 responses first survey, 32 responses second survey.			up to 12 weeks focused on developing confidence and subsequent socialisation and access to community.			social contacts = reduced loneliness.	Improvements in loneliness may not be sustained.	
Gebel et al. (2020)	Qualitative	13 middle-aged older adults Aged 44–84.	18+ experiencing loneliness, social isolation and poor wellbeing.	Medium and Holistic	Community connectors service: Structured support service enabling access to early intervention and prevention services. Referrals from statutory services for those who are not eligible for weekly assessments; self-referrals. Needs assessed within 48 hr of referral and assigned a 'champion' who provides person-centred support. Low level = meeting person at local organisations; medium = helping with day-to-day tasks; high = providing company on daily tasks and to community groups. 14-week programme.	Yes. 'Champions'	N/A.	Increased connection with community directly helped to reduce loneliness and subsequent MH problems, e.g., depression. More connection improved wellbeing in all aspects of life through being more self-aware and encouraging self-care.	Qual themes: Falling out of society; Easy self-referral; Structured support service; Reconnecting with community.	38%
Greaves and Farbus (2006)	Mixed-methods; longitudinal.	Qual (n = 35); Participants; carers and	Individuals going through life change.	Signposting and Holistic	Upstream healthy living: Community-based intervention whereby mentors work	Yes. 'Mentors'	89% still engaged at 6-months.	Mentors promoted confidence in participants and enabled them to feel	Quant: Geriatric Depression Scale (Sheikh & Yesavage, 1986); SF12	57%

(Continues)

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
		health professionals. Quant: 172 (baseline); 70 (6-month follow-up); 51 (12-month follow-up) M age = 77			closely with participants to re-engage them in life and personal interests through supporting participant-determined activities (e.g., exercise, creative), with an emphasis on social interaction. Regular weekly visits and support from mentors until participants gain confidence.			cared for. This allowed them to better socially engage and achieve new things. This encouraged long-term maintenance of these activities beyond mentor support.	Health Quality of Life (Ware, Kosinski, & Keller, 1996); Medical Outcomes Social Support Survey (Sherbourne & Stewart, 1991). Qual themes: Psychological and social benefits; Physical health benefits.	
Hassan et al. (2020)	Qualitative	N = 18. Aged 34–65.	General public.	Signposting	The Life Rooms Model: Visitors access Life Rooms and are welcomed by staff. Support options available explored with staff experienced in mental health, housing, employment etc. Mainly learning opportunities provided to give advice on how to manage mental health alongside social and creative offerings.	No.	N/A.	The safe space led people to open up and connect with others. This connection validated their personal experiences, improving mental health, confidence and independence.	Qual themes: Social belonging: Being able to just 'be'; Resourceful and accessible; Social inclusion and connectedness; Moving forward: Self-development and independence.	38%
Kellezi et al. (2019)	Mixed-methods	Qual: GPs, health coaches, link workers and patients (n = 35). Quant: 630 (baseline),	People with chronic illness who are experiencing loneliness.	Holistic	East midlands programme that aims to increase participants illness self-management and address psychosocial needs with the intention to reduce primary care	Yes. 'Health Coaches (HC)'	Quant: 176 at follow-up compared with baseline (630).	LW promoted confidence which allowed participants to connect with similar others in the group. This alleviated loneliness and enhanced social	Quant: Number of group memberships; single item measure of community belonging (Hayward, Dowds, & Shaw, 2014); ULS-8 (Hays & DiMatteo, 1987);	62%

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
		176 at T1 (4-month follow-up). Aged 22–85.			usage. HC assesses patient and provides either self-care or refers to LW who provides holistic support for up to 8 weeks.			connectedness. Group memberships positively predict sense of community belongingness which leads to lower levels of loneliness.	Health service use (Kellezi et al., 2019). Qual themes: GP perspective: Social factors and the need for a holistic service; LW perspectives: Social needs and the community; Patients' perspective: Relationship with LW and building social and building social connections.	
Moore and Thew (2022)	Qualitative	N = 6. Aged 18–24.	Young adults.	Signposting	Occupation-based community intervention; gardening.	No.	N/A.	Self-efficacy and confidence increased through group participation.	Qual themes: Social belonging and connection; A safe space; Sense of achievement from active engagement; the facilitatory aspect of nature.	37%
Orellana, Manthorpe, and Tinker (2020)	Mixed-Methods	Quant: N = 23. Qual: N = 16. Aged 68–101. <i>Mean age</i> = 83.	Older people who are socially isolated.	Signposting	Day centres for older people: Referrals from local authority with maximum of 10 people per day centre.	No.	N/A.	Connecting with similar others increased their social connections and fun. This reduced social isolation and improved wellbeing.	Quant: Adult Social Care Outcomes Toolkit (Department of Health, 2017); Edmonton Frail Scale (Rolfson, Majumdar, Tsuyuki, Tahir, & Rockwood, 2006); SWEMWBS (Taggart, Stewart-Brown, & Parkinson, 2015); Practitioner Assessment of Network Type (Wenger, 1997).	51%

(Continues)

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
									Qual themes: Day centre attendance provided access to social participation and companionship; Day centres provided something (different) to do; Day centres provided the opportunity to go out and have a change of environment; Improved mental wellbeing and health; Practical support, information and access to other services; Physical wellbeing, health and safety; Having a meal (food and drink); Accommodation cleanliness and comfort; Personal cleanliness and comfort; Process outcomes.	
Porter et al. (2023)	Qualitative.	Qual survey: n = 93. Qual interviews: n = 21. M age = 66.	Men who experience loneliness and social isolation.	Light.	Men's sheds: a UK based association that offers community spaces for men. They maintain the shed and also make and mend things for the community.	No.	Yes.	Health and wellbeing of shed members if improved through transforming stereotypes on masculine behaviour in positive ways that allow them to normalise reflecting on their own health and wellbeing and discussing this with	Qual themes: Experience of joining a shed; Success factors and risks of social prescribing; We care but we are not carers.	45%

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Redmond, Sumner, Crone, and Hughes (2019)	Qualitative	N = 1,272.	People with low mood, recent bereavement or socially isolated.	Signposting	Art Lift: Arts of referral. Patients referred from primary care for low mood, bereavement and being socially isolated. Art sessions led by a skilled artist: Drawing, mosaics, painting and creative writing. 8–10 week course. Group interaction is encouraged but not mandatory.	No.	N/A.	other members in an informal space. The group setting allows them to feel connected to others in a way that promotes trust. They are able to connect with similar others due to the group being for a specific set of people, but focused on a specific activity, i.e., art which helps them feel confident and like they are doing something for themselves rather than typical support groups which have a heavy focus on diagnosis.	Qual themes: Being with others; Being on my own; Doing something for me; Losing oneself; Threshold.	38%
Roberts and Windle (2019)	Mixed-Methods	120 for both methods.	Older people experiencing isolation and loneliness.	Holistic	Cadwyn Mon (Anglesey links/chain): Aims to reduce loneliness of older people through volunteers offering companionship and support to increase confidence, social networks and independence. Clients meet with volunteers once a week for 15 weeks.	Yes.	66% retained at follow-up.	Volunteer coordinators promoted confidence in participants which enabled them to join community and social groups that they had been signposted to. Qualitative data suggests they were well matched to clients to help provide support and guidance that increased their confidence. This engagement increased wellbeing through	Quant: De Jong Gierveld Loneliness Scale (De Jong Gierveld & Van Tilburg, 2006); Lubben Social Network Scale (Lubben et al., 2006); Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Qual themes: Psychological effects; Lifestyle effects.	59%

(Continues)

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Simpson, Smith, Furlong, Ireland, and Giebel (2020)	Qualitative	5 people living with Motor Neurone Disease. 4 Link workers (n = 9). Aged 40–79. M age = 56.	People living with Motor Neurone Disease.	Holistic	Primary Care mental health service for pwMND (16+); The Modified Interest Checklist was used to choose specific interventions and participants were supported to pursue activities of their choice with support from an occupational therapist and link worker.	Yes.	4 participants due to their condition worsening or declining support.	enhancing social participation in life. Connecting with others enhances one's self concept and acknowledging that you are participating in life rather than doing it on your own. Link workers were instrumental for boosting participants' confidence to engage with these activities.	Qual themes: Participation; Aids and adaptations; Confidence; Stigma; Link workers' experiences; Training needs.	49%
Thomson et al. (2020)	Mixed-Methods	Qual: 16 Quant: 20 M age = 53 Aged 44–70	Vulnerable, disadvantaged adults who accessed MH services.	Medium	Not So Grim Up North initiative; 'GROW: Art, Park & Wellbeing' (specific programme). Combined engagement in horticulture, creative and art-based activities. Groups met at the park and utilised museum spaces to connect indoor and outdoor activities. 2-hr sessions including talks, demonstrations and practical activities held on consecutive Tuesdays for 10 weeks.	No.	Phase 1 attrition (10 participants).	Wellbeing improved through improvements in social engagement and reductions in social isolation.	Quant: UCL Museum Wellbeing Measure (Thomson & Chatterjee, 2015). Qual themes: Sense of community; Decreasing social isolation; Self-esteem.	48%
Todd, Camic, Lockyer,	Qualitative	N = 20. Aged 66–85.	Isolated older people.	Light	Museums-On- Prescription (MoP). 12 museums, each	Not strictly— But group facilitators	N/A.	Educational aspect of MoP increased self-esteem through	Qual themes: Interacting social context; Evaluating self	47%

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Thomson, and Chatterjee (2017)					providing different activities dependent on available expertise and resources, but with the overall intention to enhance engagement and participation. Activities included object handling, crafting, singing and music, tours, 2-hr sessions across 10 weeks.	helped promote social engagement in activities.		enhancing knowledge and values. Increased self-esteem and confidence (also helped by the group facilitator) enhances social engagement and subsequent engagement in the programme. Positive evaluations are increased through this along with wellbeing.	and others; Communicating; Social engagement; Sharing experiences; Museum as a positive enabler; Enabling; New experience; Role of facilitator; Activities; Physical space; Individual journey; Activity levels; Emotion; Health; Expectation; Relational Processes; Judging others; Influence.	
Venter and Buller (2014)	Mixed-Methods	Qual: 6 Quant: 44 Aged 25–45	Individuals with mild-to-moderate mental health problems.	Light	Arts on Referral (AoR). Individuals referred to regular arts groups to improve confidence and social networks, and reduce healthcare costs.	No.	N/A.	Social support gained from groups suggested to mediate relationship between AoR and beneficial health outcomes. Social context encouraged them to develop sense of pride in their work which increased self-esteem.	Quant: WEMWBS (Tennant et al., 2007). Qual themes: Differences by gender; Normalising emotions; Differences my ethnicity. The importance of breaking social isolation; Art as therapy.	57%
Vogelpoel and Jarrold (2014)	Mixed-Methods	12 participants across all methods.	Older people with MH problems, social isolation, and sensory impairment.	Medium	Arts-on-prescription: GPs referred patients to Voluntary Action Rotherham who were then referred to a project coordinator who initiated personal recruitment process and navigated needs. Regular contact	Yes. Project Coordinator	N/A.	Increased confidence as a result of encouragement from the Project Coordinator led to more engagement in group discussions and subsequently more social connections.	Quant: WEMWBS (Tennant et al., 2007); Dynamic Observation Scale (Thiele & Marsden, 2003). Qual themes: Increased self-confidence; Reduced social isolation; Establishing new friendships, belonging and group	38%

(Continues)

TABLE 1 (Continued)

Author/s and year	Design	Sample	Target population	Social prescribing (SP) type	Programme overview	Link worker (LW)	Completion rates	Suggested mechanism of action	Outcome measures	Quality rating
Wakefield et al. (2020)	Quantitative	630 (baseline), 176 at T1 (4-month follow-up). Aged 22–85.	People with chronic illness who are experiencing loneliness.	Holistic	maintained throughout programme. (see above).	Yes.	Continued attrition: T0 = 630 pts, T1 = 176 pts, T2 = 63 pts (retained).	Group memberships gained from participation increased QoL but only indirectly. This relationship was serially mediated by increases in social support and reductions in loneliness.	cohesion; Mental wellbeing; Art-making, self-value. Quant: Number of group memberships; Community belonging (Hayward et al., 2014); Social support (Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005); ULS-8 (Hays & DiMatteo, 1987); EQ5D (EuroQol Group, 1990).	58%
Woodall et al. (2018)	Mixed-Methods	Qual: N = 26. Quant: N = 436, 342 at follow-up (18-months). M age = 53.	14+, registered with a GP.	Light	Wellbeing coordinators offer support and provide advice on local community groups. Wellbeing coordinators assess patients and then individuals then referred into relevant activities. Self-referral into the programme, or GP referral. Typically 6 sessions to avoid over-dependence. Mean length of time in service = 10 weeks.	Yes. 'Wellbeing Coordinator'	436 at baseline compared to 342 with complete data at post (18-months)—with ~2,250–3,750 service used in contact during that time.	Increased social connectedness as a result of participation increased confidence and sense of purpose which overall increased wellbeing. Increased confidence also strengthened existing interpersonal relationships. Wellbeing Coordinators were fundamental for getting participants involved in activities that alleviated feelings of isolation. Made participants feel cared for.	Quant: WEMWBS (Tennant et al., 2007); EQ5D (EuroQol Group, 1990); Campaign to End Loneliness Measurement Tool (Goodman et al., 2020). Qual themes: Wellbeing; Health and functioning; Social networks; Use of GP services; The attributes of the Wellbeing Coordinator; Engaging men; Flexibility and Duration of the Service; Understanding the voluntary and community sector.	44%

4.1 | Characteristics of included studies

Ten studies employed a mixed-methods design, eight employed a qualitative design and one was a quantitative service evaluation. Publication dates ranged from May 2006 to October 2023. Of the studies included, sample sizes ranged from 6 to 2,250 participants. Age of participants ranged from 18 to 85, with most participants being at the upper end of this age bracket (see Table 1 for average ages for each study). Six Social Prescribing programmes were identified as *signposting* Social Prescribing, where participants were directed toward community groups for general wellbeing needs (one of which also had *holistic* elements), five as *light* Social Prescribing (where participants were directed toward community programmes designed to target a specific need), three as *medium* Social Prescribing (where participants were referred to a health facilitator within a GP practice who identified appropriate community activities; one with holistic elements), and the remaining five programmes as solely *holistic* Social Prescribing (where participants were referred to established Social Prescribing programmes and their engagement often supported by a Link Worker).

All included articles that adopted a mixed-methods design combined quantitative and qualitative components. For quantitative elements, WEMWBS (Warwick-Edinburgh Mental Wellbeing Scale; Tennant et al., 2007) and the SWEMWBS (Stewart-Brown et al., 2009; Taggart et al., 2015) were common outcome measures for overall wellbeing, with further wellbeing measures including the Short Form 12 (Ware et al., 1996); Satisfaction with Life Scale (Diener et al., 1985), the Adult Social Care Outcomes Toolkit (Netten et al., 2011), health-related quality of life, as measured by the EQ5D (EuroQol Group, 1990); the UCL Museum Wellbeing Measure (Thomson & Chatterjee, 2015); the Dynamic Observation Scale (Thiele & Marsden, 2003) and the Edmonton Frail Scale (Rolfson et al., 2006). Social identity processes were measured via: Number of group memberships; Community Belonging Single Item Scale (Hayward et al., 2014); the Social Support Scale (Haslam et al., 2005); The Lubben Social Network Scale (Lubben et al., 2006); Practitioner Assessment of Network Type (PANT; Wenger, 1997) and The Medical Outcomes Study Social Support Survey (MOSSS; Sherbourne & Stewart, 1991). Loneliness was measured by: The Campaign to End Loneliness Measurement Tool (Goodman, Wrigley, Silversides, & Venus-Balgobin, 2020); UCLA loneliness Scale (Hays & DiMatteo, 1987; Hughes et al., 2004) and the De Jong Gierveld Loneliness Scale (De Jong Gierveld & Van Tilburg, 2006). Depression was measured using the Geriatric Depression Scale (Sheikh & Yesavage, 1986) and the PHQ-2 (Kroenke et al., 2003). Anxiety was measured using the GAD-7 (Spitzer et al., 2006). One paper (Finn et al., 2023) also measured self-esteem (Self-esteem scale; Robins et al., 2001) and self-efficacy (General Self-Efficacy Scale; Romppel et al., 2013). Health service use (e.g., asking about number of GP visits in past 3 months) was also observed in one paper (Kellezi et al., 2019).

No studies had control groups, however, 11² had longitudinal designs that allowed them to observe changes pre- and post-intervention, as well as sustained benefits at 2 (Finn et al., 2023), 3 (Cheshire et al., 2022; Foster et al., 2020; Thomson et al., 2020; Todd et al., 2017; Vogelpoel & Jarrold, 2014), 4 (Kellezi et al., 2019; Wakefield et al., 2020), 6 (Greaves & Farbus, 2006; Venter & Buller, 2014; Wakefield et al., 2020), 9 (Wakefield et al., 2020), 12 (Greaves & Farbus, 2006) and 18 months (Woodall et al., 2018).

For qualitative elements, interviews and focus groups were most commonly used, including service users, Link Workers and GPs, as well as other practitioners involved in the Social Prescribing pathways (e.g., Health Coaches/Coordinators). Two studies included open-ended survey questions to obtain qualitative data (Cheshire et al., 2022; Porter et al., 2023).

4.2 | Quality of included studies

Assessment of article quality was conducted using CONSORT-SPI 2018 (Grant et al., 2018), and each paper was scored on a '0, 0.5, 1' system, where 1 indicated criteria fulfilled, 0.5 indicated partial fulfilment, and 0 indicated not present (see Supporting Information File A). Where quality criteria were only applicable to quantitative elements, no

score was given for qualitative components. To ensure consistency for comparison, percentages were calculated for scores in relation to applicable criteria. Most articles fell within the lower range, with overall scores ranging from 37% to 66%. All articles were retained due to similar performance.

4.3 | Findings from the narrative synthesis

Findings were synthesised in tabular format (see Table 1), and themes developed in relation to the research aims. The presence of SIAH processes is discussed throughout all themes:

1. Theme 1: 'Good Quality' Social Connection
 - a. Felt Understanding and Shared Experiences
 - b. Link Workers as Engagement Facilitators
 - c. Self-Efficacy as Central for Sustained Social Prescribing Benefits
2. Theme 2: Distinguishing Between Social Connection, Social Isolation and Loneliness

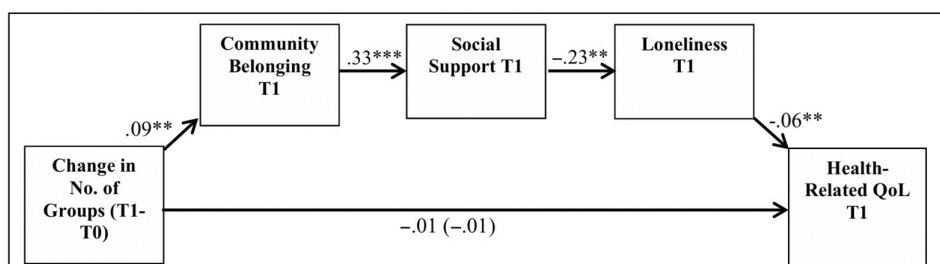
4.4 | Theme 1: 'Good quality' social connection

One aim of this systematic review was to identify Social Prescribing initiatives focused on enhancing social belongingness and decreasing loneliness, as well as evaluating the extent to which they achieved these aims. All papers discussed improvements in participants' social connection and overall wellbeing, and all but four (Cheshire et al., 2022; Moore & Thew, 2022; Orellana et al., 2020; Simpson et al., 2020) reported reductions in loneliness following the Social Prescribing programme. However, the degree to which each Social Prescribing programme achieved these outcomes was determined by the programme's ability to elicit good quality social connections between group members, defined as those connections with others that were meaningful and relevant.

Indeed, Social Prescribing research that was underpinned by the SIAH demonstrates serial indirect-only mediation between the number of group memberships and Quality of Life via stronger identification with the community that in turn increases sense of belonging and reduces loneliness (see Figure 3; Wakefield et al., 2020). This emphasises that it is not just the quantity of group memberships alone that lead to beneficial outcomes, but rather the quality of those relationships that allow an individual to feel connected to other group members in order to access psychological resources (also see Kellezi et al., 2019 for similar findings on outcome measures of primary care usage). Thus, Social Prescribing needs to support beneficiaries' joining (and continued membership of) groups they perceive to be psychologically meaningful. This review identifies several ways in which this can be attained.

4.4.1 | Sub-theme 1a: Felt understanding and shared experiences

One element that was key for developing good quality social connections was how strongly individuals felt other group members empathised with and shared similar experiences; experiences which had often been psychologically challenging for them (e.g., anxiety; Cheshire et al., 2022). Sharing these challenging experiences increased their sense of shared identity, which SIAH literature indicates is fundamental for feeling a sense of belonging with other group members (i.e., enhanced group identification) and therefore being able to effectively draw on the psychological resources, such as social support, that groups can provide (Jetten et al., 2017; Neville, Templeton, Smith, & Louis, 2021). This psychological process was exemplified by participants in Thomson and colleague's (Thomson et al., 2020) mixed-methods paper:



Supplementary Figure 3. T0/T1 ($n = 178$): Serial mediation model. C path: total effect outside brackets, direct effect inside brackets. Control variables (age, gender, relationship status, education level, T0 community belonging, T0 social support, T0 loneliness, T0 health-related quality of life) are not pictured. Note: $*** p < .001$, $** p \leq .01$.

FIGURE 3 Serial mediation model taken from Wakefield et al. (2020).

'It was very important to relate to people, that we had a common ground factor and that was our mental health experiences. Any other art group that wasn't focused around mental health, I would never be able to have the same chats and the same connection and the same understanding and empathy' (Thomson et al., 2020).

It is this sense of psychological connection to other group members, as opposed to just an increased number of group connections that allows individuals to reap group benefits. Indeed, in a considerable number of papers which had qualitative elements (Finn et al., 2023; Hassan et al., 2020; Kellezi et al., 2019; Orellana et al., 2020; Porter et al., 2023; Redmond et al., 2019; Simpson et al., 2020; Thomson et al., 2020), participants discussed how sharing similar experiences with other group members allowed participants to feel a sense of trust and mutual understanding which enabled them to be emotionally authentic with other group members. This is because group spaces built on shared understandings validate and normalise personal experiences, as most clearly demonstrated in the following excerpt from a participant in Hassan et al.'s (2020) study:

'When you're going through mental health issues, you feel so isolated—you are the only person that this has happened to—until you come to places like this and you think, "Oh ... I'm not" ... that feeling of isolation can sort of go then' (Hassan et al., 2020).

Thus, for Social Prescribing to reduce loneliness, Social Prescribing must go beyond arbitrary groupings and instead provide participants with an opportunity to make meaningful social connections that they perceive as being valuable and of high quality; a central argument of the SIAH which argues that group identification (e.g., perceiving a sense of belonging) unlocks health and wellbeing benefits associated with group life (Jetten et al., 2017; Wakefield et al., 2020). Referring individuals to groups where they share similar experiences with others is one way of achieving this.

4.4.2 | Sub-theme 1b: Link workers as engagement facilitators

Another route for facilitating high quality engagement with social groups is through the provision of a Link Worker. To date, Social Prescribing research has been unable to reliably establish the beneficial role of the Link Worker for Social Prescribing outcomes (Bickerdike et al., 2017). However, while the role of the Link Worker was not the central focus of this review, data synthesis demonstrated that out of the 10 Social Prescribing programmes that included a Link Worker in some form (also referred to as: 'mentors'; Giebel et al., 2020; 'Volunteer Coordinators'; Greaves &

Farbus, 2006; 'Champions'; Kellezi et al., 2019; 'Wellbeing Coordinators'; Roberts & Windle, 2019; 'Group Facilitators'; Todd et al., 2017; 'Health Coaches'; Woodall et al., 2018; 'Project Coordinators'; Vogelpoel & Jarrold, 2014), 8³ reported on their centrality for facilitating group engagement. Specifically, studies by Foster et al. (2020), Greaves and Farbus (2006), and Kellezi et al. (2019), indicate that the ability of Link Workers to impart empathetic and tailored support provided the space and understanding service users needed to reflect on the progress they were making during Social Prescribing participation. As illustrated by participants in Kellezi et al.' (2019) paper:

'I felt as though they gave me the chance to reason out that I was getting better. I listened to them. I knew what was going on in my head, but I couldn't always, I didn't always want to tell anyone. I seemed, with the link-worker, I seemed as though I could get over that more quickly. He wasn't demanding. He was very quiet and very gentle with it, and that is the way that I needed somebody to be, to maybe listen to me, really listen to me, and hear what I was saying, if you can understand that' (Kellezi et al., 2019).

This empathy in Link Worker–client relationships was made possible through good matching of Link Workers to clients (Roberts & Windle, 2019). Similar to the previous subtheme, this allowed the relationship to be built on a sense of trust and mutual understanding that allowed clients to be heard, cared for and supported by their Link Worker. Feeling understood and seen subsequently increased an individual's confidence and sense of purpose in life, as demonstrated by participants in Greaves and Farbus' (2006) study:

'The fact that somebody was going to come and see me on a regular basis because the other thing that I've suffered really with is a fear of abandonment ... It makes you feel ... like somebody's bothered about you. Yes, somebody cares. I would say it's things like that that give people a bit of purpose, a bit of encouragement ... Going back to [all the new things I've be doing], I wouldn't have the confidence to do half those things a couple of months ago' (Greaves & Farbus, 2006).

As a result of this good relationship with the Link Worker, participants self-efficacy increased which enhanced their engagement with group activities (Greaves & Farbus, 2006; Kellezi et al., 2019; Simpson et al., 2020). This is because Link Workers allowed clients to feel valued and believe they had the capabilities to engage in group settings. Coupled with Link Workers' support in finding similar others to connect to within the group (e.g., Kellezi et al., 2019; also see previous subtheme), clients were able to draw on the psychological benefits of group life (e.g., social support, sense of meaning in life; Jetten et al., 2017; Wakefield et al., 2019).

4.4.3 | Sub-theme 1c: Self-efficacy as central for sustained Social Prescribing benefits

The final point highlighted as important for ensuring good quality social connections was self-efficacy. As discussed in the previous subtheme, Link Workers can help promote self-efficacy which encourages initial group engagement. However, self-efficacy also continues to develop throughout (i.e., if participants have good group experiences) and beyond (i.e., through continued participation in community groups) the Social Prescribing programmes. Important to note at this juncture is that across articles reviewed, the terms *self-confidence* (Greaves & Farbus, 2006; Hassan et al., 2020; Kellezi et al., 2019; Moore & Thew, 2022; Redmond et al., 2019; Roberts & Windle, 2019; Simpson et al., 2020; Vogelpoel & Jarrold, 2014; Woodall et al., 2018) and *self-esteem* (Todd et al., 2017; Venter & Buller, 2014) were often used to refer to this facet. However, following analysis and synthesis, it was concluded that participants' experiences relating to these factors better reflected the concept of self-efficacy, where self-efficacy is defined as an individuals' belief in their capacity to execute the necessary behaviours to achieve an outcome (Bandura, 1997a). This is different from self-esteem, which is not task-specific and instead outlines one's general evaluation of their self-worth (Bandura, 1997b; Lane, Lane, &

Kyprianou, 2004; Malureanu, Panisoara, & Lazar, 2021). In a similar vein, self-confidence refers to one's holistic belief about their ability to exert control over their behaviour and social environment; there is no set direction (unlike self-efficacy which has an outcome or goal, Bandura, 1997b).

Specifically, self-efficacy was central to participants' experience of Social Prescribing, and from which they perceived all other benefits as stemming. This is because feeling understood and supported by group members became a basis for empowerment (e.g., *'I feel more empowered to do better things and improve my life. I've got more confidence to do things'*; Giebel et al., 2020). Feeling empowered allowed participants to develop their skills in the area that the group activity was based on (e.g., social skills and team building through a horticultural workshop; Moore & Thew, 2022). This increased self-efficacy by allowing participants to achieve new things, and then applying these new skills in other areas of their life:

'I was able to develop my horticultural skills and learn social skills that I could transfer into my life and work—they can even help with getting a job [pause] ... It helped me with teambuilding and leadership skills. As a care leaver [erm], we don't get support, so this has been a real good experience for me!' (Moore & Thew, 2022).

As demonstrated above, the development of a specific skill, social skills in this instance, through participation in Social Prescribing, increased capacity to have successful social interactions across several domains of their life. While increases in self-esteem and self-confidence complimented these changes, these improvements were directly related to increasing valued social engagement: a specific activity rather than a general self-confidence and thus reflective of self-efficacy.

As mentioned, Social Prescribing programmes facilitated this self-efficacy initially from interactions with Link Workers who encouraged participants to engage in social activities. Continued engagement with Social Prescribing allowed participants to build on this themselves, prompting them to engage in additional social groups and activities beyond their completion of the Social Prescribing programme, thereby allowing them to *'build relationships outside of the group'* (Moore & Thew, 2022). Self-efficacy most importantly gave participants autonomy to take back control in their lives: control of their physical environments, their health, and their emotions. Thus, not only did participants experience sustained Social Prescribing benefits through extending their engagement with social groups independently, but also by leading them to take better care of their physical and mental health:

'What it made me do was reassess my life and how important actually I am, and how I need to give myself something ... I reassess my life basically, and how important it was for me to find time for me to do stuff. To be a bit more autonomous in my own healthcare' (Cheshire et al., 2022).

Thus, the role of self-efficacy becomes central to Social Prescribing because it facilitates both active engagement in Social Prescribing and a continued self-engagement in social settings beyond programme completion by increasing participants' perceived capacity to achieve this (also see Frings & Alberly, 2015). In this way, self-efficacy is two-fold. Having good quality social connections with group members through feeling understood and Link Worker encouragement allows self-efficacy to develop, and once developed, self-efficacy is the basis for maintaining these good quality connections long-term.

4.5 | Theme 2: Distinguishing between social connection, social isolation, and loneliness

Through applying a SIAH lens to the articles reviewed, theme one has highlighted how good quality social connections, over the number of social connections, are the determining factor for positive Social Prescribing outcomes.

While novel for much Social Prescribing research, Liebmann et al. (2022) have highlighted the need to acknowledge this difference through distinguishing between *loneliness* and *social isolation* within Social Prescribing research. Loneliness refers to the *perceived* mismatch between one's actual and desired social engagement (an unwanted experience of social isolation; Haslam et al., 2024; Perlman & Peplau, 1981), whereas social isolation refers to an absence or paucity of opportunities to socially connect (Gardiner, Geldenhuys, & Gott, 2018). The former relates to the quality, and the latter to the quantity, of social connections. Through a SIAH lens, this distinction is important because if an individual feels that they do not have good quality social connection, not only do they have a perceived lack of social connection, but they also lose access to key psychological resources that are beneficial for health and wellbeing (; Haslam et al., 2024; Hayes et al., 2023). Nonetheless, across the literature, these concepts are often viewed synonymously despite being conceptually different. For example, three papers (Kellezi et al., 2019; Orellana et al., 2020; Wakefield et al., 2020) specifically measured quantity of social groups (which has no bearing on the quality of the relationships) and a further eight papers conceptualised their findings in relation to social isolation (Cheshire et al., 2022; Greaves & Farbus, 2006; Porter et al., 2023; Simpson et al., 2020; Thomson et al., 2020; Todd et al., 2017; Venter & Buller, 2014; Vogelpoel & Jarrold, 2014). Thus, studies may be, inadvertently, exploring the effectiveness of Social Prescribing for social isolation rather than the psychologically valuable component that has a bearing on individuals' ability to access key psychological resources; loneliness.

Failing to distinguish between social isolation and loneliness means that reduced levels of either loneliness or social isolation are both interpreted to be indicative of beneficial increases in social connection. In line with this, nine papers (Hassan et al., 2020; Kellezi et al., 2019; Roberts & Windle, 2019; Thomson et al., 2020; Todd et al., 2017; Venter & Buller, 2014; Vogelpoel & Jarrold, 2014; Wakefield et al., 2020; Woodall et al., 2018) conceptualised social connectedness and loneliness/social isolation as correlating negatively with each other. That is to say that as an individual shows increases in social connectedness, decreases in loneliness/social isolation were expected. However, this definition and understanding of social connection is problematic because it means that one could be highly socially connected to groups to which one feels no sense of belonging. That is, social connectedness ignores the psychological aspect of group membership (i.e., feeling connected and a sense of belonging with other group members); the aspect the SIAH argues is vital for reducing loneliness and promoting wellbeing (Haslam et al., 2018; Haslam et al., 2024; Jetten et al., 2017) and as evidenced in theme one of the current systematic review. This is because the degree to which an individual identifies and connects with other group members has a direct impact on the health and wellbeing benefits they experience as a result of Social Prescribing participation. Consequently, utilising outcome measures that do not capture this sense of connection and receipt of psychological resources from other group members limits our ability to correctly identify those Social Prescribing programmes that do achieve these benefits. While quantitative data may indicate that number of group memberships is a positive predictor of community belonging (i.e., the quality of relationships; Kellezi et al., 2019; Wakefield et al., 2020), this cannot be assumed in all cases. As noted by Giebel et al. (2020), just because an individual is more socially engaged does not mean that they are automatically less lonely.

Conceptualisations of social connectedness in this way meant that loneliness, social isolation and social connectedness were all used synonymously and as such were largely reflective of social isolation rather than adequately capturing the quality of relationships developed during Social Prescribing. The challenges of this became clear. For example, a reviewed article which used social isolation as a proxy for an absence of social connectedness (Roberts & Windle, 2019) failed to account for the possibility that an individual who scores low on levels of social isolation (i.e., they have several opportunities to socially connect) may not automatically feel more socially connected and may still experience loneliness (perhaps because they do not feel a sense of identification and belonging with these prescribed groups; see Haslam et al., 2024). While the authors did also measure loneliness, they argued that the most successful part of the Social Prescribing programme was its ability to facilitate opportunities for social relationships to develop, yet there was very little consideration of the service-users' perceived *quality* of these relationships. The limitations of this become clear when the authors concluded that although there were significant improvements in all measures of wellbeing following the Social Prescribing intervention, including loneliness and social isolation, the

mean score for loneliness was still low, indicative of persistent high general levels of loneliness. Thus, reducing social isolation does not always predict beneficially significant increases in social connectedness and reductions in loneliness, perhaps in view of the fact that arbitrary provision of social groups (which would address social isolation) does not provision groups from which psychological resources can be accessed (see Haslam et al., 2024; Hayes et al., 2023).

Like in theme one, this distinction between loneliness and social isolation underscores the importance for Social Prescribing evaluations to focus on how beneficiaries perceive and experience the quality of the social connections they develop during Social Prescribing, rather than solely considering the quantity of groups or group members to which an individual is connected. This begins by distinguishing between loneliness and social isolation in order to focus Social Prescribing evaluations on psychologically valuable outcomes (e.g., social connectedness; group identification; social support, etc.; Haslam et al., 2024). Nonetheless, even among research that does conceptually differentiate between loneliness and social isolation (e.g., Foster et al., 2020), and suggestions from qualitative findings indicating the importance of meaningful connections with others (see Theme 1), Social Prescribing research does not always include quantitative measures of SIAH process variables that would capture relationship quality. This, in part, can be attributed to the lack of theoretical underpinnings of existing research that has prevented researchers acknowledging their potential role within Social Prescribing. For example, apart from the 3 papers that used SIAH hypotheses to guide their research (Finn et al., 2023; Kellezi et al., 2019; Wakefield et al., 2020), only 6 (Finn et al., 2023; Foster et al., 2020; Kellezi et al., 2019; Roberts & Windle, 2019; Wakefield et al., 2020; Woodall et al., 2018) of the 11 papers with quantitative elements explicitly measured loneliness. Out of those, four (Finn et al., 2023; Kellezi et al., 2019; Roberts & Windle, 2019; Wakefield et al., 2020) simultaneously included measures pertaining the quality of those relationships (i.e., through perceived social support (Roberts & Windle, 2019); or sense of community belongingness (Kellezi et al., 2019; Wakefield et al., 2020)) that would allow relationship quality to be identified as a mediating factor between group engagement and meaningful reductions in loneliness. A further three papers (Thomson et al., 2020; Venter & Buller, 2014; Vogelpoel & Jarrold, 2014) focused solely on wellbeing as an outcome measure, and two looked at depression and anxiety (Finn et al., 2023; Greaves & Farbus, 2006). As such, the outcome measures used for Social Prescribing evaluations for articles included in this review mostly fail to acknowledge the importance of quality over the quantity when it comes to social connections, thereby being unable to account for the mediating processes (e.g., social support, sense of belonging and group identification; Haslam et al., 2024) that may be consequential for beneficial health and wellbeing outcomes often observed in the included articles.

Future Social Prescribing research should adopt the SIAH when designing their interventions and select variables capable of assessing SIAH variables. A good recent example of this is that by Finn et al. (2023), demonstrating how utilising a SIAH lens and focusing on Social Cure processes such as constructing a shared group identity can facilitate reductions in loneliness and improvements in general wellbeing and mental health outcomes.

5 | DISCUSSION

Previous literature has highlighted the challenges of Social Prescribing implementation and evaluation (Adams, Behague, Caduff, Lowy, & Ortega, 2019; Bickerdike et al., 2017; Cunningham et al., 2023). The NHS (2014, 2017) has also advocated the need for more robust evidence regarding the efficacy of Social Prescribing to produce evidence-based initiatives. One challenge has been in substantiating the theoretical underpinnings of Social Prescribing to understand what works, for whom, and in what circumstances (Bickerdike et al., 2017). To achieve this, extant literature has advocated the need for focused and standardised systematic reviews (Bickerdike et al., 2017; Costa et al., 2021; Napierala et al., 2022; Percival et al., 2022). The present systematic review accomplished this by applying a theoretical framework, SIAH, to review evaluations of a subset of Social Prescribing programmes that aimed to enhance social belongingness and reduce loneliness (see Stevenson et al., 2019 for the benefit of applying the SIAH

to understand and evaluate Social Prescribing programmes). In the current study, the SIAH was demonstrated to provide a compelling approach for identifying the active mechanisms of Social Prescribing interventions that focus on alleviating loneliness and enhancing social connection given that it explained how social processes (e.g., social support, self-efficacy, sense of belongingness, etc.) associated with valuable group memberships can lead to improvements in health and wellbeing. In light of the themes identified as a result of applying a SIAH lens, there are a number of implications.

5.1 | Implications for social prescribing

One implication relates to the intended aim of Social Prescribing programmes. To date, Social Prescribing has been focused on the provision of social groups with limited understanding as to what factors make these group spaces more or less beneficial for those involved. However, as evidenced in the current review, a Social Prescribing programme must not only facilitate opportunities for social engagement, addressing social isolation, but it must also have a cognitive impact on the individual by alleviating feelings of loneliness. In essence, Social Prescribing should positively affect an individual's perception of their social connections, rather than merely providing opportunities for social engagement to occur; a key argument of the SIAH (Wakefield et al., 2019) and a finding also reflected in the Australian context (Dingle & Sharman, 2022). Importantly, these social connections must allow a sense of trust between group members to be developed in order for Social Prescribing to be most effective (Dingle et al., 2024). To achieve this, Social Prescribing groupings must transcend mere arbitrary or proximal associations and instead provide group members with a common ground that is both psychologically significant and relevant to them. It is this sense of psychological connection that promotes a sense of shared identity (also see Jetten et al., 2017; Neville et al., 2021) and allows group members to unlock valuable psychological resources such as increased social support, trust and a sense of belongingness (see *The Social Support Hypothesis*; *The Identification Hypothesis*; Jetten et al., 2017; also see Wakefield et al., 2020). Link Workers can play a key role here, identifying groups that they feel will benefit the individual most and allow them to connect to similar others. This is key, particularly where many individuals being referred to Social Prescribing programmes are vulnerable (Cruwys et al., 2018), and subsequently may struggle with stigma, mistrust and fears of negative evaluation that can impede their engagement and connection with other group members (Dingle & Sharman, 2022). Thus, inclusion of a Link Worker in all Social Prescribing programmes where resources allow is recommended for enhancing engagement with Social Prescribing; a benefit that has been captured in previous research (albeit limited; Sharman et al., 2022). As suggested by previous research, the psychologically valuable components should also be communicated to participants to enhance their engagement with these key proponents (see Kellezi et al., 2019; Wakefield et al., 2020), for example, making them cognitively aware of the changes that are occurring as a result of their participation. This cognisance is central to increasing an individuals' self-efficacy, where self-efficacy is suggested to be fundamental for long-term Social Prescribing benefits (e.g., Giebel et al., 2020; Hassan et al., 2020; Moore & Thew, 2022) and allows participants the autonomy to manage their own health (e.g., Cheshire et al., 2022; also see Schunk & DiBenedetto, 2021 on the role of self-efficacy for increasing personal autonomy). Again, Link Workers are key here for enhancing self-efficacy through allowing this space for self-reflection that allows the participant to observe self-growth. Importantly, while Social Prescribing is seen as context dependent because it relies on local community resources (McIntosh et al., 2016; Sonke et al., 2023), self-efficacy can be transferred between contexts and maintained over time (Schunk & DiBenedetto, 2021). As such, enhancing self-efficacy and acknowledging the centrality of it within Social Prescribing can be beneficial for enhancing Social Prescribing's long-term and widespread positive outcomes (see Figure 4).

These sustained benefits are of utmost importance given funding challenges within the NHS (e.g., NHS, 2014, 2019), and the commitment within the NHS' long-term plans (NHS, 2019) to move away from short-sighted approaches and instead adopt longer-term sustainable programmes. Further, Social Prescribing programmes are often time-limited in nature, in part because of resource challenges both within the NHS and the voluntary sector

(Bickerdike et al., 2017). Thus, future Social Prescribing development, particularly in places where social and economic deprivation are pervasive (Watt, Raymond, & Ratchet-Jaquet, 2022), would gain from enhancing the aforementioned elements.

5.2 | Implications for research

Importantly then, changes with Social Prescribing programme delivery to enhance health benefits observed must also be reflected in research outcomes. This is because without adequate measures of relationship quality, the centrality of this for achieving good Social Prescribing outcomes cannot be established. As demonstrated within the findings, Social Prescribing programmes to an extent do achieve good quality relationships, however the degree to which they all achieve this is unknown; knowledge which is needed in order to further understand the conditions under which these good quality relationships can be continuously achieved rather than them occurring by chance. It is this consistency that is key for establishing a strong evidence base for Social Prescribing (Bickerdike et al., 2017; Dingle et al., 2024). One way of capturing this is through the inclusion of SIAH outcome measures such as community connectedness, self-efficacy, loneliness and social support simultaneously (e.g., Finn et al., 2023; Wakefield et al., 2020) to demonstrate the mediating role of relationship quality between Social Prescribing participation and positive health outcomes. In the current systematic review, this was demonstrated among qualitative components of the included articles, however, quantitative evidence was lacking due to specific outcomes measures not being employed; a notion similarly echoed by Zurynski, Vedovi, and Smith (2020) in the Australian context and the global evidence base at large (Sonke et al., 2023). With a preference for quantitative findings to support healthcare programme implementation (Guetterman, 2019), it is key that these concepts are measured within quantitative work to provide rigorous support for these elements and their role in Social Prescribing efficacy so that future research can enhance their centrality. However, as highlighted by Dingle et al. (2024), it is of increasing importance that these outcomes are followed up over extended periods of time, particularly where different formats (e.g., online vs. community-based) can have different time parameters for beneficial effects to be observed. Overall, a focus on longitudinal SIAH elements, rather than general health outcomes (e.g., wellbeing) would be a beneficial step for moving the focus of Social Prescribing evaluations away from social isolation and toward loneliness reduction and social connection enhancement; a conceptually advantageous shift based on the findings of this systematic review.

5.3 | Implications for theory

Altogether, these findings have implications for theory development. As demonstrated, the SIAH was a useful tool for coherently understanding a broad range of findings and has shed light on how SIAH processes can help us to understand the benefits observed as a result of Social Prescribing participation. Understanding these processes also helps researchers understand how these beneficial effects can be consistently enhanced and tailored for specific groups. Resultant inclusion of SIAH process variables is a necessary step in substantiating the SIAH as a theoretical basis for Social Prescribing (see Kellezi et al., 2019; Wakefield et al., 2020 for early examples of this).

However, this review has also highlighted some of the shortcomings of the SIAH centred around the confused and limited role of self-efficacy. This has implications for both theoretically underpinning Social Prescribing and also for adapting SIAH theory. For example, qualitative findings within the reviewed articles highlight the potentially mediating role of self-efficacy between Social Prescribing group engagement and long-term benefits, which is often missed from quantitative elements. As depicted in Figure 4, and drawn from qualitative data in the reviewed papers, it can be suggested that self-efficacy has a more central role in producing beneficial Social Prescribing outcomes than is currently presented within both research and SIAH models because it allows participants to acknowledge their own potential for advancing their social engagement and exploring this with the support of other group members to

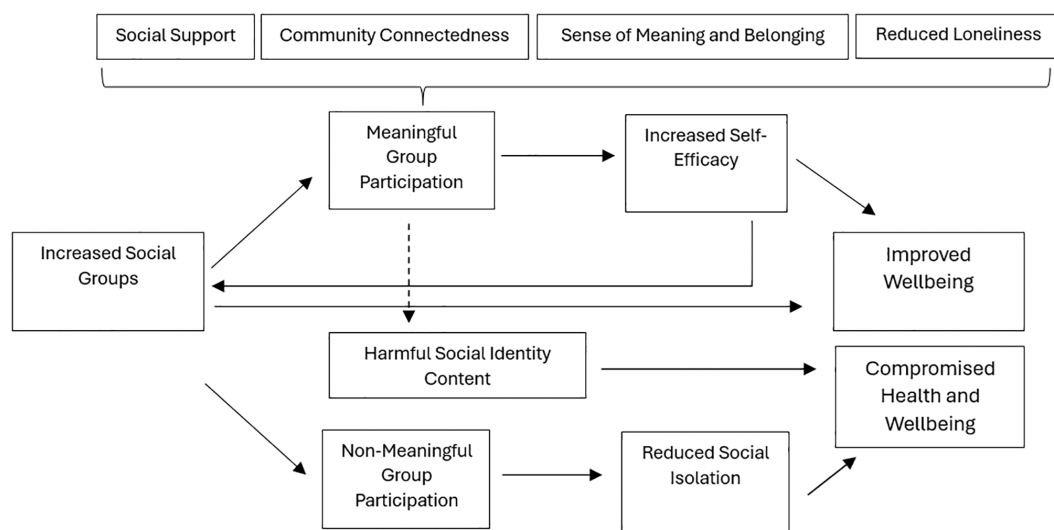


FIGURE 4 Adapted version of SIAH mechanisms active within SP programmes based on synthesis of reviewed articles.

achieve new things (also see Frings & Albery, 2015 on the role of social identities for developing self-efficacy). This is demonstrated in human motivation research, specifically Bandura's (1997a, 1997b) Social Cognitive Theory whereby feeling one has the capabilities to perform actions, in this instance social engagement, can encourage motivational and affective processes (Schunk & DiBenedetto, 2021); central for increasing an individual's overall wellbeing (Jiang & Ngien, 2020). Thus, it can be suggested that a reconsideration of the role of self-efficacy within Social Prescribing and SIAH models could elevate the long-term benefits achieved from Social Prescribing; long-term benefits that existing research has emphasised a need to understand (see Foster et al., 2020). Nonetheless, this review demonstrates the SIAH is an appropriate framework for grounding Social Prescribing programmes, as suggested by previous literature (e.g., Haslam et al., 2024; Stevenson et al., 2019). Adopting a SIAH lens allowed this review to identify why some Social Prescribing programmes are more efficacious than others, and therefore allowed the research to draw the above recommendations. Future Social Prescribing programme delivery should therefore consider SIAH processes when designing Social Prescribing programmes to enhance the beneficial health outcomes that can be achieved.

5.4 | Wider implications and future directions

This review focuses on Social Prescribing programs within the United Kingdom. However, the UK's adoption of Social Prescribing is not unique. Other countries are also beginning to employ these models to address holistic healthcare needs and inequalities (Morse et al., 2022). Although the UK pioneered the popularisation of Social Prescribing, it is now implemented in at least 17 countries (Morse et al., 2022). In particular, Australia is emerging as a significant contributor to research on the Social Identity Approach to Health (SIAH; e.g., Haslam et al., 2018; Jetten et al., 2017) and its recent applications to Social Prescribing (Haslam et al., 2024; also see Kellezi et al., 2019; Wakefield et al., 2020 for applications within the United Kingdom). Additionally, the Groups 4 Health initiative, originally from Australia, is now being extended to the United Kingdom, Germany, and Switzerland (Haslam et al., 2018; The University of Queensland, 2018).

Consequently, the implications for Social Prescribing implementation, research, and theory discussed here have broader ramifications. For example, while the United Kingdom is beginning to see theoretically underpinned Social Prescribing initiatives (e.g., Kellezi et al., 2019; Wakefield et al., 2020), and more globally we are observing the early development of SIAH models of Social Prescribing (Haslam et al., 2024), several initiatives in other countries are still not grounded in this evidence base (e.g., Men's Sheds; Foettinger et al., 2022; also see Ito, 2024 on Men's Sheds, Japan). This gap is problematic, especially given the aforementioned international rollout of Social Prescribing programs (e.g., Groups 4 Health; Haslam et al., 2018), as it limits our understanding of how to successfully transfer and implement these initiatives across countries. Thus, the points raised here can guide a more consistent and theoretically informed implementation of Social Prescribing programs both within and outside the United Kingdom.

However, the context-specific nature of Social Prescribing and the need for tailoring programs to specific sub-populations (Husk et al., 2019; Morse et al., 2022) raises questions about whether theoretical mechanisms hold across countries and cultures. Indeed, Evers et al. (2024) identified 11 distinct theories explaining the health outcomes of Social Prescribing participation, indicating a lack of global consensus on the active mechanisms of Social Prescribing. This divergence leads to different formats of delivery and outcome measures, complicating cross-country comparisons and international implementation. Positively, however, despite the more recent emergence of Social Prescribing within Australia (in comparison to the United Kingdom), several of our findings mirror their own: Quality over the quantity of social groups (Dingle et al., 2024); the key role of the Link Worker (Sharman et al., 2022); and the need for standardised outcome measures (Zurynski et al., 2020). In view of the fact that SIAH work emerging from Australia is extensive, it can be argued that this theoretical basis does indeed explain the active mechanisms of Social Prescribing across contexts. Overall, then, collaborative global efforts, such as those by the Global Social Prescribing Alliance and the International Social Prescribing Network, are essential. These endeavours would ensure the development and evaluation of Social Prescribing programmes based on a common body of knowledge, enabling cross-cultural comparison and validation of theoretical suggestions across geographical boundaries.

Lastly, both Social Prescribing and SIAH research are rapidly evolving fields. Consequently, future research needs to be responsive to this. For example, while composing the present research, Haslam et al. (2024) developed and published newly defined categories of Social Prescribing that better align with the SIAH. In line with Open Research principles, we elected not to change the definition and categories of Social Prescribing for this review given: (a) intervention format (e.g., signposting, light, medium, holistic Social Prescribing; Kimberlee, 2015) was a key category of extracted data; (b) invention format did, in part, have a bearing on the success of Social Prescribing Interventions (e.g., holistic Social Prescribing and the role of the Link Worker for achieving good quality social connections); and (c) the Social Prescribing programmes reviewed often drew on Kimberlee's (2015) definitions. Having said that, it is clear how Haslam et al. (2024) definition complements this existing work. Future research may wish to move toward adoption of Haslam et al. (2024) definitions and categories of Social Prescribing, particularly for SIAH work in this area.

5.5 | Strengths and limitations

To the authors' knowledge, this is the first review of Social Prescribing programmes focused on reducing loneliness and increasing social connectedness that applies a SIAH lens to interpret the data. This theoretical foundation is much needed and is fundamental for improving future development of Social Prescribing (Evers et al., 2024; Stevenson et al., 2019). The strengths of a mixed-methods appraisal of the literature were also apparent where qualitative findings were more readily able to illuminate the presence of SIAH processes within Social Prescribing in comparison to quantitative elements which often did not include direct measures of SIAH process variables (e.g., Greaves & Farbus, 2006; also see Sonke et al., 2023).

Due to the low-rated quality of the articles included within this review, direct comparisons between studies were challenging given the variation within outcome measures and variables of interest, as well as how concepts

were operationalised. This has previously been identified as a limitation when attempting to synthesise Social Prescribing literature (e.g., Bickerdike et al., 2017; Costa et al., 2021; Liebmann et al., 2022; Napierala et al., 2022; Percival et al., 2022; Reinhardt et al., 2014). This variation may also be reflective of the extensive search strategy employed as our intention was to limit missing key articles for inclusion. However, in the current review, application of the SIAH gave the researchers a common framework to draw together the evidence for a more comprehensive synthesis than has been possible with previous reviews.

Finally, it must be noted that while this work begins to provide a theoretical grounding for Social Prescribing, building on existing and recent research (Haslam et al., 2024; Kellezi et al., 2019; Wakefield et al., 2020), several additional challenges for Social Prescribing implementation and evaluation still need to be addressed. For example, there are unresolved questions relating to structural elements of Social Prescribing. That is to say that we do not yet understand how to best integrate Social Prescribing into existing healthcare services to create holistic and complementary healthcare systems. While Social Prescribing may be delivered within a primary care practice, at current, these are only tangentially related services (e.g., Westlake et al., 2023). Thus, further work that takes a systems-level approach to Social Prescribing (rather than intervention-level) is needed (also see Husk et al., 2016; 2019). This includes evaluation of all components of Social Prescribing programmes beyond health outcomes, for example, what leads to differences in outcomes across groups?; how well do staff understand Social Prescribing?; and what are the best referral mechanisms for successful delivery? (Evers et al., 2024).

6 | CONCLUSION

The implementation of Social Prescribing is rapidly advancing without a concomitant evidence base to support its effectiveness. One of the key challenges relates to a lack of consistency both across Social Prescribing programme delivery and in its subsequent evaluation. Prior systematic reviews advocate the need for Social Prescribing to be comparative by design. This systematic review was able to address these concerns by reviewing the available evidence in relation to a common theoretical framework; the SIAH. Not only did this enable this review to identify how Social Cure processes are central to Social Prescribing health and wellbeing benefits, but it was also able to categorically examine a mixed range of evidence and provide guidance for future Social Prescribing delivery and evaluation. This guidance highlights the key role of facilitating shared understanding among Social Prescribing participants for enhancing health benefits obtained. This can be achieved through the provision of empathetic Link Workers referring service users to appropriate groups with similar others and encouraging the development of self-efficacy to maintain health improvements long-term. Subsequent evaluations of Social Prescribing programmes can capture these health changes by including SIAH process variables to illuminate how relationship quality mediates participation in Social Prescribing and associated health benefits.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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ENDNOTES

- ¹ Note that inclusion criteria did not require studies to have specific outcome measures of loneliness and/or social connectedness. Rather, the specified Social Prescribing programme just had to be defined as targeting loneliness or social connectedness.
- ² Cheshire et al. (2022); Finn et al. (2023); Foster et al. (2020); Greaves and Farbus (2006); Kellezi et al. (2019); Thomson et al. (2020); Todd et al. (2017); Venter and Buller (2014); Vogelpoel and Jarrold (2014); Wakefield et al. (2020); Woodall et al. (2018).
- ³ Foster et al. (2020); Greaves and Farbus (2006); Kellezi et al. (2019); Roberts and Windle (2019); Simpson et al. (2020); Todd et al. (2017); Vogelpoel and Jarrold (2014); Woodall et al. (2018).

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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