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# **“Living with aphasia the best way I can”: a feasibility study exploring solution focused brief therapy for people with aphasia**

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Short title: Solution focused brief therapy for people with aphasia

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## **Abstract**

*Objective.* Post-stroke aphasia can profoundly affect a person's social and emotional well-being. This study explored the feasibility of solution focused brief therapy as an accessible intervention, and investigated its impact on participants' psychosocial well-being.

*Participants and methods.* Small-scale repeated measures feasibility study. Participants received between three and five therapy sessions. They were assessed on psychosocial outcome measures pre and post therapy, and took part in post-therapy in-depth qualitative interviews. Three men and two women with chronic aphasia took part; age range 40s to 70s.

*Results.* Participants found the therapy acceptable and it was possible to adapt the approach so as to be communicatively accessible. Quantitative assessments showed encouraging trends in improved mood: pre-therapy GHQ-12 mean (SD): 4.80 (4.60), median: 6; post therapy mean (SD): 2.00 (2.55), median: 1; and improved communicative participation: pre-therapy CPIB mean (SD): 7.80 (5.76), median: 7; post therapy mean (SD): 12.20 (4.44), median: 14. Measures of social network and connectedness, however, remained stable. Themes emerging from the qualitative analysis included changes to mood, communicative participation, mobility and everyday activities.

*Conclusions.* This small-scale study suggests solution focused brief therapy is a promising approach in helping people with aphasia build positive change in their lives.

## **Introduction**

Around one third of stroke survivors will have aphasia [1], and the psychosocial consequences can be considerable. Rates of depression are estimated at 29% in the long-term post stroke [2], and for people with aphasia this figure rises to 62-70% [3]. The social consequences of aphasia can also be severe. The family unit is placed under strain [4, 5]; people take part in fewer social activities [6]; and are at risk of losing contact with friends and their wider social network [7, 8]. Neglecting psychosocial well-being potentially has broader ramifications. Poor social support post stroke is associated with worse physical recovery [9, 10], and increased likelihood of a future adverse event such as a second stroke [11]. Similarly, post stroke depression is associated with worse rehabilitation outcomes, increased carer strain, and higher mortality [12].

A Cochrane review examined the effectiveness of interventions for preventing depression post stroke, finding psychotherapeutic interventions to be more effective than pharmacological approaches [13]; yet the psychotherapy studies reviewed either excluded those with aphasia altogether, or only included those with mild aphasia. Further, none of the included studies demonstrated evidence for improved social activities. One recent study focused specifically on people with aphasia and reported improved mood following behavioural therapy, delivered by assistant psychologists [14], although no improvements were noted on leisure activities. In terms of therapy approaches to improve social participation, a number of studies have reported encouraging results for therapy delivered in a group context for people with aphasia [15, 16]. Yet there is less evidence for therapy approaches suitable for people with aphasia who are socially withdrawn and either unable or unwilling to attend groups.

## **Solution Focused Brief Therapy**

A promising intervention is Solution Focused Brief Therapy (SFBT)[17, 18]. SFBT is an approach to building change, with a focus on exceptions to the problem or times when the problem is less severe, rather than on the problem itself. Key aspects of the approach include encouraging a person to describe their 'preferred future' (how they would like their life to be); exploring a person's skills, resources, resilience, and past successes; and enabling people to notice positive signs of change [18, 19]. Unlike other behavioural treatments, SFBT may typically only involve three to five sessions [18]. A recent systematic review of the

effectiveness of SFBT reviewed 43 controlled outcome studies and found that 74% reported significant positive results, while 23% reported positive trends [20]. The strongest evidence of its effectiveness was in treating adults with depression, where it was comparable yet briefer and therefore less costly than alternative approaches. SFBT has not yet been evaluated for those with post-stroke aphasia.

The aim of the current study was to explore whether it was possible to adapt SFBT so that it was communicatively accessible for people with aphasia; and to investigate the impact of the therapy on participants' social and emotional well-being.

## **Methods**

This was a small-scale proof-of-concept feasibility study using a mixed-methods repeated measures design. Ethical approval was obtained from City University London School of Health Sciences Research Ethics Committee. All those who agreed to take part in the study gave informed consent, and names and identifying information have been changed throughout this paper to preserve anonymity.

**Recruitment procedure.** Participants were recruited through community stroke and aphasia groups, and through a University register of people with aphasia. Potential participants were identified between December 2013 and February 2014. People were eligible to take part in the study if they presented with aphasia, were at least six months post stroke, medically stable, and over 18 years old. Presence of aphasia was screened using the Frenchay Aphasia Screening Test (FAST)[21] and clinical assessment. While those with any severity of expressive aphasia were eligible to take part (score range of expressive domains of the FAST: 0 to 15, with lower scores indicating more severe expressive aphasia), those with very severe receptive aphasia were excluded as they would have difficulty comprehending the assessments (scoring less than 7/15 on the receptive domains of the FAST). People were also excluded if they did not speak fluent English prior to their stroke; if they had a documented diagnosis of dementia; significant auditory impairment; or if they were unable to give informed consent.

**Participant characteristics.** Six potential participants were identified, and five consented to take part. Participant characteristics are detailed in Table One. Participants were three men and two women, ranging in age from 40s to 70s; none were in employment at the time of

the study. Three participants lived on their own; one lived with her young daughter, and one with his wife. Participants were between two and 14 years post stroke and had mild to moderate aphasia; one participant, Al, additionally had severe dyspraxia. All participants had impaired mobility, although only one was unable to leave his flat without assistance (Bayya). Three of the participants regularly attended aphasia groups.

*[Table 1 about here]*

**Assessment schedule.** All participants took part in pre and post therapy assessments, as well as post therapy in-depth interviews. Pre-therapy assessments took place 4 weeks (+/- 2 weeks) prior to therapy. All post-therapy assessments took place a week after therapy was completed (range = 7 – 9 days); in-depth interviews were carried out 2 - 4 weeks post therapy. At Colin's suggestion, he and his wife additionally provided qualitative written feedback, responding to written prompts based around the topic guide. Qualitative interviews took on average one hour (range = 29 - 98 minutes).

**Evaluating the approach.** The acceptability of the therapy approach was assessed through the in-depth interviews which probed how participants had experienced the therapy. Therapy sessions were also audio-recorded and detailed field notes were made after each session to allow the therapist to reflect on the sessions and the ways in which the approach could be adjusted so as to be more accessible to those with language difficulties. Completion rates were also recorded. In addition, the qualitative interviews explored topics such as mood, social relationships, communication and activities. Where participants indicated that change had occurred, the processes by which change had taken place was also probed. A topic guide is provided in Appendix A.

Evidence of the acceptability of outcome measures and their sensitivity in picking up changes described in the qualitative interviews was also collected. Psychological distress was assessed using the General Health Questionnaire 12 item version (GHQ-12)[22]. Scores on the GHQ-12 range from 0 to 12, with higher scores indicating greater distress. This measure has been widely used in the stroke population, including in a study recruiting

people with aphasia [23], where a cut-off score of 3 was used to identify those with high distress.

Communicative participation was assessed using the Communicative Participation Item Bank (CPIB) [24], which has been validated on people with acquired communication disorders, and provides 'an overall client report of participation restrictions' (p1201). There are ten items and the summary score ranges from 0 to 30, with higher scores indicating that the communication disability interferes less with participation.

In terms of social connections, perceived social isolation was assessed using the Friendship Scale [25], which has been used with people with aphasia in a previous study [15]. There are six items and the summary score ranges from 0 to 24, with higher scores indicating that a person is more socially connected, and scores of 15 or lower indicating a person is isolated. Finally, social network was assessed using the Stroke Social Network Scale, which has been validated on stroke survivors with and without aphasia, and designed to be communicatively accessible [26]. There are 19 items, and scores range from 0 to 100, with higher scores indicating better functioning social networks.

**Therapy offered.** Participants were offered between three and five individual therapy sessions, and were given a choice as to the spacing and location of the sessions. Therapy was based around the model of SFBT delivered at the BRIEF therapy centre in London [18]. A typical first session would explore a person's 'best hopes' from the therapy, in order to establish shared expectations on meaningful and realistic therapy outcomes. Following from this, the participant would be facilitated in describing their 'preferred future', or what their life would be like if their best hopes were realised. They were encouraged to provide as much concrete, observable, small-scale detail as possible. The emphasis was on describing positive features (ie. what was *wanted*, rather than the absence of negative features). Scaling questions were also used, with participants invited to place themselves somewhere on a scale between 0 and 10. Ten typically represents 'best hopes realised', although was used flexibly (e.g. 10 could equal 'coping' or 'confidence to make changes'). The scaling question was used to identify participants' personal resources, skills and instances of past and present successes, as well as to explore their progress towards their preferred future. Homework was restricted to suggesting that clients notice positive signs of change to



discuss at the next session. All therapy sessions were carried out by the first author (SN), who is both a speech and language therapist (SLT) and trained in SFBT.

**Facilitating people with aphasia.** The presentation of the GHQ-12, CPIB and the Friendship Scale was modified to make them aphasia-friendly in line with best practice, for example, through the use of white space, emboldening key words, and presenting few items per page [27]. The content, however, was not changed in order to avoid affecting measures' psychometric properties. Various strategies were also employed to facilitate the responses of participants during in-depth qualitative interviews. These included: avoiding complex question forms; using all communication modalities (writing down key words, gesture, pictures, objects in the environment); and allowing plenty of time so that participants felt they had space to get across their point. Similar facilitative techniques were applied during therapy sessions.

**Analysing results.** As this was a small-scale feasibility study quantitative data was not analysed for statistically significant change. Nonetheless, change within individual participants and change across the group was examined for emerging trends. Qualitative data was analysed using Framework analysis [28]. Initial themes and concepts were identified through reviewing the data. The material was then indexed, so that every phrase was assigned a label. Thematic matrices were created, and the labelled data was summarised and synthesised into the matrices. This matrix based method of analysis allowed for both case based and thematic based analysis, facilitating systematic exploration of the range and pattern of views and experiences. The primary analysis was conducted by SN. In order to avoid bias, a second analyst, KB, independently read through the charted material, noting emerging themes, to ensure that all relevant thematic material was included in the final framework.

## **Results**

Participants received four therapy sessions on average (range: three to five), which were between 45 minutes and 90 minutes long. Four participants opted to have therapy sessions in their home. The one participant who had a spouse, and could be supported in travelling to sessions, chose to receive therapy in a relative's house, the University clinic, and over

Skype. This participant also chose for his spouse to take part in all therapy sessions and the post therapy qualitative interview.

In reporting the results, themes emerging from the in-depth interviews are presented alongside the quantitative outcome measures. A summary of quantitative results is presented in Figure 1; summary profiles of individual participants are presented in Figure 2.

### **Acceptability of the therapy approach and measures used**

All five participants completed the study. Participants reported feeling able to discuss their hopes and feelings during the therapy, and found it satisfying to be able to express themselves which their aphasia could prevent in other contexts. They identified that it was helpful that the therapist facilitated their responses, was able to rework questions, and understood what they were trying to say without it feeling too effortful.

*'I feel I've talked with you and nicely to talk with you whereas if somebody else came talked to me sometimes I can't, I can't very much at all, but, so it's good with you, I can sit and chat and that's, that's alright.'* (Edith, p5)

The participant with the most severe communication disability, however, did report finding the language load a challenge, and that the process of responding to questions could feel 'hard' (Al, p2).

In terms of the measures, there was no missing data suggesting that participants found them acceptable.

### **Perceptions of change**

Participants identified a number of areas in which they perceived change to have occurred during the time they were receiving therapy. Themes to emerge from the qualitative data included changes in: mood; communicative participation; social relationships; mobility; and daily activities.

*[Figures 1 and 2 about here]*

## **Mood**

**Quantitative evidence.** Figure 1A shows participant scores on the GHQ-12, where higher scores are indicative of greater distress. The mean (SD) score pre-therapy was 4.80 (4.60); median (IQR) = 6.00 (0 – 9.00). This reduced post therapy to mean (SD) = 2.00 (2.55); median (IQR) = 1.00 (0 – 4.50). The effect size was large: Cohen's  $d = 0.79$ . Pre-therapy, two participants scored at ceiling (0 = no distress) (Al and Bayya), and remained at ceiling post therapy. The other three participants all improved in mood by at least 3 points, and one participant reduced from 8 (high distress) to 0 (ceiling).

**Qualitative evidence.** Taking part in the therapy project enabled participants to feel more optimistic, positive and calm.

*'It's helped with my moods.'* (Colin, p2)

Nonetheless, participants' life situations were often challenging, thus improvements could be perceived as small steps albeit in the right direction. For example, Edith explained how she still felt sad at times, but it was more manageable now.

*'I still think I have a sad, but it's not, er, it's [pause] good, but, it isn't bad than it was... I mean I do get sad again, but I don't, sadness all the time, you know, it's not, now it's in my head now and again, so and that's better.'* [Edith, p1]

Only one participant, Al, reported no change to his mood.

## **Communicative participation**

**Quantitative evidence.** Figure 1B shows participant scores on the CPIB, where higher scores indicate the communication disability is interfering less with participation. Pre-therapy the mean (SD) score was 7.80 (5.76); median (IQR) = 7.00 (3.00 – 13.00). Post therapy this rose to mean (SD) = 12.20 (4.44), median (IQR) = 14 (8.00 – 15.50), with four out of five of the participants showing improvement on this measure. Effect size was large, Cohen's  $d = 0.81$ .

**Qualitative evidence.** All participants to some degree reported positive change in their communication. For one participant, she reported that her actual talking felt '*smoother*' and that '*I'm talking better, and, er, I'm not, um, words coming out more.*' [Delia, p5]. She described the impact this had on her relationships with others she knew at church:

*'I can speak properly and communicate properly [pause] long time not speaking and shy but yesterday, speaking and chatting with others. Big change... [feels] amazing.'*  
*[Delia, second therapy session]*

Participants described feeling increased confidence to talk (or write) in different situations, for example, on the telephone or ordering drinks in a café.

*'I will speak to outsider, to stranger, but earlier I could not, I would not think of speaking because he would not understand me... I'm improved now, I'm prepared to speak to strangers.'* [Bayya, p7-8]

The participant with severe dyspraxia and compromised intelligibility found the confidence to start using a communication book and writing in public, for example, to order a meal in his local pub. He reported that this helped '100%' [Al, p8].

### ***Social relationships***

**Quantitative evidence.** Figure 1C shows participant scores on the Friendship scale, assessing perceived social isolation, with higher scores indicating a person is more socially connected. Pre-therapy the mean (SD) score was 16.60 (3.91); median (IQR) = 16.00 (13.50 – 20.00). Post therapy this remained stable with mean (SD) = 17.60 (4.50); median (IQR) = 17.00 (13.50 – 22.00). Figure 1D shows participant scores on the Stroke Social Network Scale, where higher scores indicate a better functioning social network. Pre-therapy the mean (SD) score was 61.48 (10.74), median (IQR) = 58.42 (53.39 – 71.10); post therapy scores were mean (SD) = 61.45 (16.59); median (IQR) = 71.32 (44.16 – 73.84). These relatively stable statistics mask the fact that one participant, Delia, improved, while another participant, Al, declined.

**Qualitative evidence.** A couple of participants reported that they felt they were contributing more to conversations impacting on relationships, for example, they felt more able to reminisce with friends. For one participant, Al, external factors, such as his closest friend leaving the country, and a dispute with his day centre, meant that his social network deteriorated during the course of the project. Nonetheless, reflecting the trends in the quantitative data, most participants did not report any substantial changes in their important relationships. Only one participant, Delia, identified relationship change as a main

outcome of the therapy. She felt that her relationship with her brother had improved, and that she was a better parent to her young daughter.

*'I'm getting to know her [her daughter] better... Um. Long time, asking to watch TV only, not spending quality time talking but now I spend a lot of time talking.'* [Delia, p6]

However, such a brief therapy could not take away her sense of loneliness: *'Obviously, I'm lonely... some of the times [child] is sleeping. Alone, thinking, not nice.'* [Delia, p 7]

### ***Mobility***

**Qualitative evidence.** Three participants noted improvements in their walking. For Bayya, walking without his stick, both inside and outside the flat, was his main goal. He reported that at the start of therapy he was *'depending on this [his walking stick], all the time, yes'*, but by the end of therapy *'now I can walk short distance... up the road I walk without that [the stick]'* [p6]. Edith and Colin also reported walking unaided more frequently post intervention. Colin described walking on uneven terrain on country walks, walking unaided in crowded situations (for example, a busy supermarket), and walking around his village more quickly, walking challenges he had set for himself after starting the intervention.

### ***Daily activities***

**Qualitative evidence.** Several participants described new activities that they had started since the therapy began. These included Delia taking her young daughter to swimming classes, Al going out to the local pub to see a gig, and Colin volunteering for the Stroke Association. Some also resumed previous pastimes, such as using their cross trainer. One participant, Colin, also described feeling more confident to undertake activities of daily living independently (for example, showering, getting dressed), and do household tasks such as mowing the lawn and putting out rubbish.

### ***Mechanisms of change***

Participants reflected on what they felt had brought about the changes described above. Some mechanisms appeared to stem directly from SFBT techniques, while others were potentially unrelated to SFBT.

### ***SFBT-related mechanisms for change***

The process of describing to the therapist what small steps would take them 'in the right direction', or visualising a preferred future, appeared to give some participants the confidence to feel it was possible.

*'Just telling you what I'm going to do, to tell someone is good, isn't it, tell somebody, yes... When I tell somebody what I'm going to do, and then, gives me more confidence, I can do it, and tell the person, I've done that.'* [Bayya, p12]

The emphasis on identifying positives and celebrating achievements also appeared to be encouraging and empowering for participants. Thus Colin wrote *'I am making a habit of identifying positive things'* [Colin p2], while his wife observed: *'We are better at identifying and celebrating positive things. I think Colin has realised that he does make progress, every week, even if it's really tiny... I think Colin was encouraged to have a go more and subsequently feels less bad about himself.'* [Claire, p1-2]. Colin and Claire also found it helpful to write a list of '10 positive things' in a notebook each week, a task which they formulated for themselves. Colin observed that *'I tried harder with things so I could write them on my list.'* [p1]

Being able to identify one's own successful strategies for dealing with difficult emotions or situations was also commented upon. For example, during a therapy session Edith was able to observe that having a shower and going for a walk were successful strategies for lifting her mood. In the post therapy interview, she commented, *'I haven't thought about it, but now, you have made me do a little bit, that I do now stop now think it... because I have thought, now do this, and stop it, and then I start doing that, so it's good, you know.'* [Edith, p2]

Finally, acknowledgement was described as an important part of the therapeutic process, and participants described the importance of feeling understood.

### ***Non-SFBT mechanisms for change***

A number of participants asserted that the relationship with the therapist made them feel more confident, for example, to have a go talking to others. Thus when Al was asked what had helped him feel more confident communicating, he wrote *'you are friendly'* [Al, p7].

Further, having the chance to discuss concerns and worries was valued. As Edith pointed out: *'Yes, just talking about that [her worries] has been better to talk.'* [p1] While the therapist used SFBT techniques, it is possible that this effect would have been observed had the therapist used a different approach. Further, some of the participants lived isolated lives, thus simply having a conversation was valuable. As Bayya pointed out: *'It's good for me, talking... otherwise, it's TV and TV.'* [p9]

### **Barriers to change**

Experiencing set-backs, 'bad days,' health worries, or disappointing interactions with other health professionals could be discouraging. Further barriers to change that were identified included the difficulty of relying on others for everyday needs; and unhelpful responses of others, such as people talking to the carer rather than the stroke survivor. Finally, there was the sense that participants needed to balance increased independence with safety. Thus Bayya observed that while he was happy that *'I can walk more freely,'* he was also *'very careful'* [p4-5] to avoid falling.

### **Using SFBT with clients who have a chronic communication disability**

Some aspects of the approach needed to be carefully considered in order to make them appropriate and effective for people with aphasia. One example was the use of the 'miracle question'[17]. An accepted wording of this question is:

*'Suppose when you go to sleep tonight, a miracle happens and the problems that brought you here today are solved. But since you are asleep, you don't know the miracle has happened until you wake up tomorrow; what will be different tomorrow that will tell you that the miracle has happened?'* p5 [17]

This question was developed in order to help shift a client's perspective from their problems to visualising an alternative future where their best hopes are realised (the 'preferred future'). However, in the present study it posed two difficulties. Firstly, it is linguistically complex. Secondly, for most stroke survivors, the miracle would be that they are cured, which is an unrealistic hope. It was found to be more beneficial to use the 'tomorrow question' [18]:

*'Let's imagine tomorrow everything goes really well [pause]. What is the first thing you'll notice?'*

For some participants, focusing on visual aspects of the approach, such as the use of scaling questions, was more effective than more abstract questions about the future. As described in the Methods, a typical scaling question asks a client to place themselves on a scale between 10 and 0. For this study, the resulting conversation was more useful when 10 represented 'living with aphasia the best way you can', rather than 'best hopes realised'. This reframing shifted the emphasis from hopes for a full recovery, to reflecting on ways of coping with and managing a life-long condition. Consequently, it would result in more positive responses, and participants would be less likely to place themselves at 0. They would then be encouraged to list five or more reasons why they had placed themselves, for example, at 3 rather than 0, resulting in effective identification of strengths and resources.

More generally, the therapist used a number of strategies to make the approach more communicatively accessible. Firstly, the therapist modified her own language, thus she used simple syntactic structures, sign-posted topic changes, and 'chunked' information into more easily understood short phrases. She facilitated responses through careful co-construction (e.g. repeating back the parts of the message that had been understood, use of closed questions to confirm meaning). She also used all communication modalities (e.g. writing, gesture, drawing, objects in the environment) and aimed to make these modalities feel comfortable for participants to use. This was particularly pertinent for AI, who was initially reluctant to use writing, despite this being a communicative strength. Finally, the therapist prioritised making participants feel that they had as much time as they needed to get across their point.

Nonetheless, although it was possible to adapt the approach, there were a number of challenges. It could take considerable time for participants to describe small details or incidents in their lives. Yet lengthening therapy sessions in order to cover more material was problematic, as participants could become fatigued through the effort of communicating. It could also be a challenge to organise sessions when participants lived alone, struggled to read or write letters or emails, and could feel uncomfortable talking on the telephone.



Finally, although SFBT is a forward-looking approach, the importance of acknowledgement is also recognised, and was considered an important component of the approach for this client group. O'Hanlon and Beadle (1996) describe this duality as having one foot in acknowledgement and one foot in possibility [29]. In the present study acknowledgement of grief and loss, as well as pre-stroke identity, formed part of the therapy process. In post therapy interviews, participants commented on the value they placed on the therapist being interested in their pre-stroke lives as well as post stroke journeys. The following excerpt shows how this was managed in a session. During his final therapy session, Colin had listed 10 things he had been pleased to notice during the previous week. The therapist (SN) asked him how he felt seeing this list.

Colin: Good that I do that but I can't stop thinking about the times we used to do things

SN: You mean, it's lovely that you can do all this, but you're still thinking about your life before the stroke?

Colin: Yes, yes

SN: It's such a massive shift, isn't it?

Colin: Mmm

SN: Coming to terms with who you were before the stroke, and who you are now, is not easy

Colin: Yes, yes [pause]. I am a better person

SN: Better person

Colin: Yes, but now I think that I could better, yes

SN: So when you say that you're a better person now than...?

Colin: Before

SN: In what way?

Colin: I don't know. Lots of ways.

Colin's wife: Give us one

Colin [turning to his wife]: I love you

Colin's wife: You loved me before, didn't you?

Colin: No, no, not so, I, I better how I love you.

There then followed a discussion of the various other ways in which Colin felt he was a 'better' person. It was the first time Colin had described anything positive about living with

his stroke. It was arguably the combination of solution-focused techniques, which bolstered his perception of 'what was working' and what he had achieved, as well as acknowledgement, that gave Colin the space to begin to make sense of his post stroke identity.

## **Discussion**

This small-scale study explored solution focused brief therapy (SFBT) with five people who had chronic aphasia. On average, participants received four therapy sessions, with the majority of sessions taking place in participants' own homes. Participants found the therapy approach acceptable, and it was possible to adapt it so as to be communicatively accessible for people with mild to moderate aphasia. Despite the small sample size, there were encouraging trends in improved mood and communicative participation, which were evident in both the qualitative and quantitative data.

This paper adds to the evidence that SFBT can be meaningfully used for those adjusting to chronic illness. It has been argued that the future-focused nature of SFBT can help to instil hope where patients might otherwise feel overwhelmed by their medical conditions [30-32]. For example, Froerer et al. (2009) explored SFBT with people who have HIV/AIDS [31]. They suggest that the SFBT assumption that 'clients have all the resources they need to create a better life is an empowering approach for individuals who may feel powerless due to symptoms and illnesses.' (p17)[31]. The successful use of SFBT has also been described in Crohn's disease [33]; Parkinson's Disease and Multiple Sclerosis [34]; cancer [35]; with carers of stroke survivors [30]; and with a mixed caseload of people with long-term health conditions [32].

A number of these papers discuss modifications made to SFBT in order for it to work successfully with those living with long-term health conditions. In common with the present study, caution was exercised in the use of the 'miracle question' in two studies [30, 35]. For example, as an alternative Plosker and Chang (2014) focused questions around carers visualising 'their "best selves" within the present circumstances' (p39)[30]. It is argued that a description of a preferred future is more effective where it is located in the client's current life, and is something they could realistically hope for [18]. Yet stroke survivors face the uncertainty of not knowing how much future recovery they can realistically expect.

Recognising that determination and hope cannot guarantee a full recovery, and that for many 'getting back to normal' is unlikely to happen, has been described as a distressing process [36]. As such, managing hopes of future recovery needed to be sensitively handled when discussing a person's preferred future.

Closely linked to accepting the limits of recovery is identity work. For those with aphasia it has been argued that an essential component of psychological recovery is 'being able to adapt and cope with the changed self' (p12)[37], a process made more complex by the loss of language with which to negotiate the challenges to their identity. Parr (1997)[38] refers to this as the "inside work" in which 'the aphasic person [is] actively making an account of what has happened which makes sense to them .... [is] constructing a new sense of self' [p136]. In the present project, a decision was made to allow participants space for renegotiation of identity, including acknowledgement of grief, loss and disrupted life plans, while simultaneously encouraging participants to imagine a positive post stroke future self.

An obvious challenge in the present study was adapting a talking therapy for people who have a language difficulty. In fact, participants appeared to find it a satisfying experience, and valued the chance to discuss their hopes and feelings, as facilitated by a trained speech and language therapist. It is arguably inherently challenging for a person with aphasia to make sense of their impaired communication ability in conversation[38]. This client group may therefore have particular need for the chance to be supported in verbalising the impact of the stroke on their lives. While there were necessary adjustments to the approach (for example, covering less material; modifying question forms so as to be more accessible), the study found that people with aphasia perceived the therapy as empowering, in line with other studies exploring SFBT with people who have a chronic illness [31, 32].

When discussing the acceptability of the therapy, participants described feeling relaxed and enjoying the sessions, replicating other SFBT projects [39]. This may reflect that SFBT allows the client to direct the conversation and therapy more than is typical in other approaches. This cooperative stance is evident in the way solution focused practitioners respond to the client's language. A recent study conducted a microanalysis of the language used by therapists in SFBT, cognitive behavioural therapy (CBT), and motivational interviewing (MI) sessions [40]. They found that SFBT therapist utterances preserved a significantly higher

proportion of the client's exact words, and added significantly fewer therapist interpretations than in either CBT or MI.

The client-led nature of SFBT, and the types of questions used, encouraged participants to set holistic goals relating to many different areas of their life. Thus participants elected to focus not only on the impact of aphasia, but also other stroke-related disability, as well as difficulties unrelated to the stroke. In terms of research, it is therefore a challenge to determine which constructs to assess for change across the group, as what is a meaningful area of change for one participant (e.g. independence in ADL; e.g. social relationships) may not be of concern to another. More generally, SFBT does not assume a direct connection between problem and solution [19]. Thus the 'solutions' which participants started to notice in their own lives were sometimes unexpected. For example, Delia became aware that in setting aside quiet time in the evenings to pray and feel calm she felt more confident, which arguably helped her to join in conversations during the day.

Although mood and communicative participation improved, the outcome measures assessing perceived social isolation and social network functioning remained stable in this project for most participants. This trend was not contradicted by the qualitative interviews. Other studies have found perceived social support to be a stable construct both in the general population [41] and post stroke [23]. Both perceived social support/social isolation and also social network functioning appear to be difficult constructs to change, with stroke therapy studies generally reporting negative results [42, 43]. Further, in the present project, four out of five participants received a 'compressed' version of SFBT, electing to have therapy sessions on a weekly basis over four or five weeks. It may be that this model of delivery did not allow participants sufficient time to alter their sense of social connectedness. The one participant, Delia, whose therapy was more spaced out also experienced the most positive change in terms of her social relationships.

In terms of how this project fits with the priorities of stroke survivors, caregivers, and health professionals, a recent consensus document found that three out of the ten top priorities for stroke research related to social aspects of 'living with stroke', including increasing confidence, and enabling people to 'cope' with speech problems [44]. Stroke survivors argued that 'there was little point providing rehabilitation aimed at impairments if the

patient did not have the confidence to use the skills learned during rehabilitation and participate in daily activities' (p317). Preliminary evidence from the completed study suggests that SFBT can facilitate a person in rebuilding their confidence to participate, which in turn appeared to elevate their mood.

### **Study limitations and future directions**

This was a small-scale proof-of-concept study, and further studies are needed to provide robust evidence of effectiveness. Furthermore, the same person (SN) both delivered the therapy and carried out the assessments and in-depth interviews. While all steps were taken to encourage participants to reflect honestly on their experiences of the therapy, nonetheless, there may have been an inevitable bias created. There was also no control group, thus some of the positive change may have been as a result of receiving regular visits from someone perceived as supportive, rather than specifically to do with SFBT techniques. A further limitation is that there was no follow up. Therefore while there may have been benefits immediately post therapy, it is not possible to determine whether participants were able to incorporate change into their lives long-term. Finally, participants were offered a fixed number of sessions over a brief timeframe. Yet it is more typical of SFBT to spread sessions over several months, and for clients' to take ownership both over the number of sessions and also the ending of the therapy [19]. It may be that had sessions been more spaced out, participants may have had more opportunity to build sustained change into their lives.

In terms of the measures used to collect data, it was reassuring that there was little contradiction between the qualitative and quantitative strands of evidence, and that the assessment schedule was found to be acceptable to this population. In considering suitable outcome measures for a future study, it may be useful to assess additional constructs such as confidence and increased independence in ADL. Furthermore, assessments of social engagement or social participation may be more likely to pick up on meaningful change than assessing the relatively stable concept of perceived social support/isolation.

In terms of future directions, a systematic analysis of recorded therapy sessions could enhance understanding of the ways in which this therapy approach may be successfully modified for people with aphasia. Future studies could also explore the feasibility of

adapting this approach for those with severe aphasia, who were not included in the present study. Larger scale investigations would provide stronger evidence of the effectiveness of SFBT in promoting social participation and emotional well-being post stroke. An analysis of cost effectiveness could also strengthen the case for adopting SFBT with this client group. More broadly, the published papers exploring SFBT in chronic illness are either early phase feasibility studies [32, 33], or descriptions of novel applications of the therapy approach [30, 31, 34, 35]. There thus exists a gap in the evidence base for sufficiently powered studies with a control group design that demonstrate the effectiveness of this approach in managing chronic health conditions.

## **Conclusion**

Stroke and aphasia can profoundly affect a person's social and emotional well-being. This small-scale feasibility study explored solution focused brief therapy as a psychosocial intervention for this client group. Three men and two women with mild to moderate aphasia took part, and found the therapy approach communicatively accessible and highly acceptable. Both qualitative and quantitative results described improvements in participants' communicative participation and mood, suggesting that this is a promising approach in helping people with aphasia build positive change in their lives.

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Table 1. Participant characteristics

<b>Pseudo -nym</b>	<b>Age range</b>	<b>Ethnicity</b>	<b>Living situation</b>	<b>Years post stroke</b>	<b>Total FAST score</b>	<b>Care arrangements</b>	<b>Attend aphasia group</b>
<b>Al</b>	60-65	Black	On his own	7 (1 <sup>st</sup> stroke) 4 (2 <sup>nd</sup> stroke)	22/30	Daily carer	Y
<b>Bayya</b>	60-65	Asian	On his own	4	21/30	Daily carer	Y
<b>Colin</b>	55-60	White	With wife	2	27/30	Wife main carer	N
<b>Delia</b>	40-45	Black	With young child	14	15/30	Daily carer	N
<b>Edith</b>	70-75	White	On her own	4 (1 <sup>st</sup> stroke) 2 (2 <sup>nd</sup> stroke)	18/30	Independent	Y



## Figure 1. Outcome measures administered pre and post therapy

Figure 1A: General Health Questionnaire-12

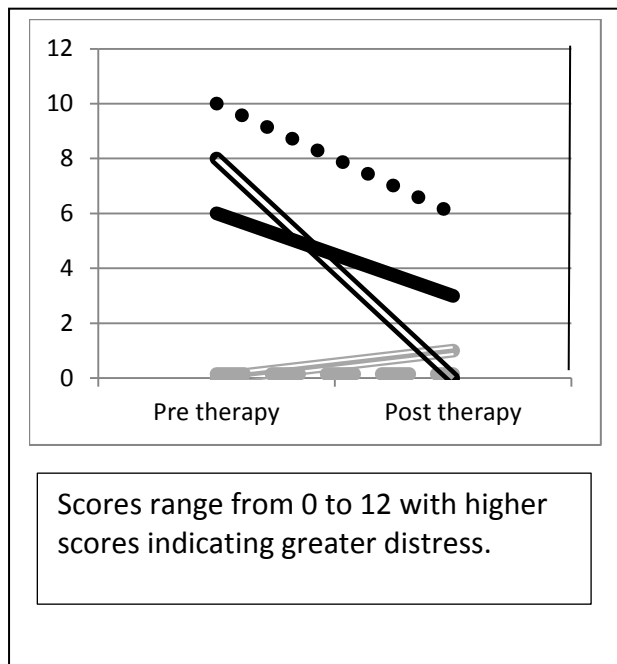


Figure 1C: The Friendship Scale

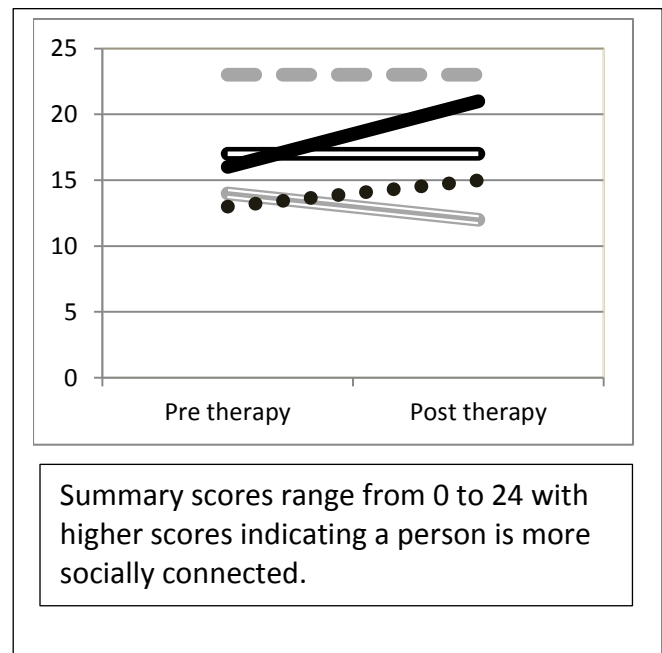


Figure 1B: Communicative Participation Item Bank

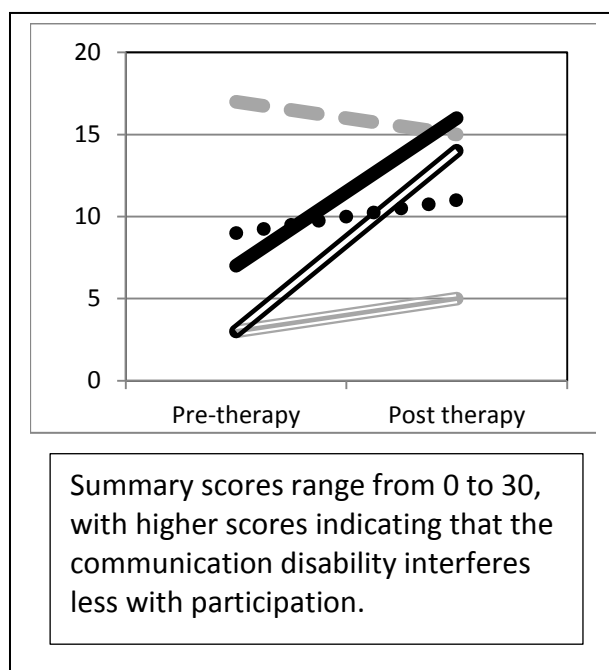
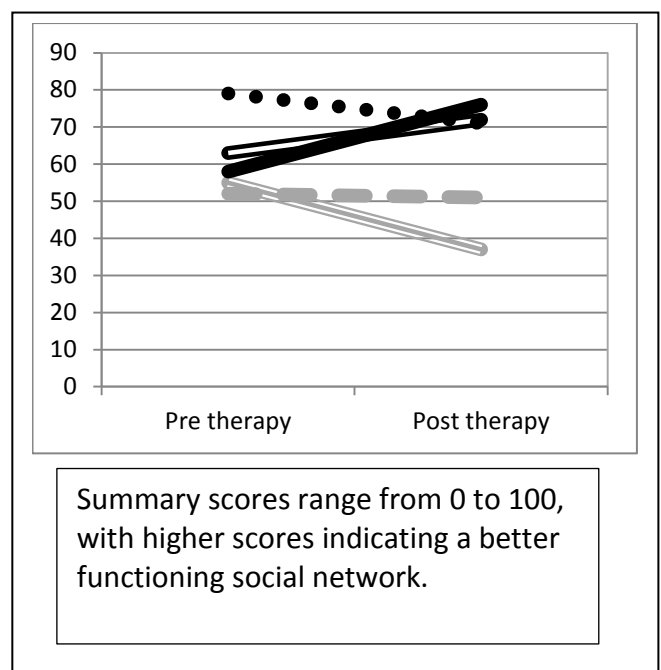


Figure 1D: Stroke Social Network Scale



### Footnote:

Al		Colin		Edith	
Bayya		Delia			

## **Figure 2. Summary profiles of individual participants.**

### **Participant 1, Al.**

Al's level of psychological distress remained low, both before and after therapy. He showed some improvement on the measure of communicative participation; qualitative data suggested that Al was more confident to go out to social activities (e.g. lunch in the pub) post therapy, and was also more prepared to write in order to solve communication breakdowns in public. Social isolation/ network scores declined, possibly reflecting the fact that a close friend had gone abroad. Al had severe dyspraxia and mild-moderate aphasia, and reported finding the therapy sessions tiring. He was ambivalent about whether the therapy had made any difference to his life, and still hoped for a full recovery from the stroke.

### **Participant 2, Bayya.**

Bayya's social network/isolation scores remained static, which reflected the stable nature of his inner social network, based primarily around one close friend. His GHQ scores indicated no psychological distress, either before or after the stroke. In terms of communicative participation he reported feeling more confident to talk in different situations, for example, to shopkeepers. However, this perceived improvement was not reflected in his CPIB scores. Bayya reported finding the therapy a satisfying experience, and felt it motivated him to improve his walking. Mobility was not assessed quantitatively in this project.

### **Participant 3, Colin.**

Colin showed marked improvement in terms of his mood. His communicative participation scores also improved, which appeared to reflect new situations where he described feeling better about his talking (e.g. when meeting old work colleagues for a drink). Perceived social isolation remained static, reflecting stability in his relationships with his closest family. Social network scores improved, however, particularly the friendship domain. Colin also described improvements in domains not assessed quantitatively, such as independence in everyday activities (e.g. getting dressed independently, putting out the rubbish, mowing the lawn, preparing porridge).

### **Participant 4, Delia.**

Delia improved on all measures, and this sense of progress was also evident in the qualitative data. She was the only participant to report significant change in her family relationships. She also felt that her talking was 'smoother', and it was easier to find the right words. She reported finding the therapy sessions enjoyable, and stated that the therapy process had helped her to make positive changes in her life.

### **Participant 5, Edith.**

Edith's GHQ score was high at the start of the project, indicating a high level of distress. This did improve, although remained relatively high even post therapy, and she was referred on to other psychological support at the end of the project. Edith made modest improvement on the CPIB measure, and her social isolation/network scores remained fairly static; she reported no change in these areas during the in-depth interview. Edith described finding the therapy process helpful, both being able to share concerns, and also the process of noticing her own successful strategies in managing her mood. Overall, Edith found the therapy a positive experience.

## **Appendix A: topic guide**

### **Experience of therapy**

- Aspects of therapy that worked well (if any)/ perceived as useful (if any)
- Aspects of therapy that didn't work well/ unhelpful/ difficult
- Suggestions for change (e.g. 'how can we make the therapy better?')

### **Mapping out their everyday life/ exploring possible change**

- Day to day life
- Relationships (e.g. with family, friends, going out, meeting people)
- Feelings/ mood/ confidence
- Talking/ how feel about talking
- Managing physical disability/ getting about/ transport

To probe: perceived change (if any) in any domain

Where/if change has been identified, explore:

- Perceived causes of change
- Impact of change (e.g. on day to day life/mood)

### **Organisation of therapy**

- Number of sessions
- Timing of sessions/ spacing/ ending therapy
- Logistics (including location, how sessions arranged)

### **Final comments/ evaluation**

- Overall evaluation of the project/ other comments
- Describing project to future participants

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