



Bangor Goal-Setting Interview Manual

Setting goals with the *BGSI Version 2*

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Goal-based approaches for behaviour change

People tend to organise their everyday activity based on what they want or need to achieve, both immediately and in the longer term. Whether the activity is a mundane everyday task or relates to an ambitious goal, having a specific outcome in mind helps in deciding what needs to be done when, and in keeping to a plan. Identifying and working towards attaining personally meaningful goals can be a powerful way of facilitating changes in behaviour, for example by helping individuals to achieve adaptive, healthier lifestyles or bring about small but important steps towards rehabilitation. Goal-setting is an important element in enabling people to function at the best possible level, whether this is about taking charge of and managing their own lifestyle and well-being or engaging in rehabilitation or reablement as a result of illness, injury or disability of any kind.

Identifying something that can be changed to improve the current situation can instil a feeling of being more in control of the situation.

Setting goals has a number of benefits:

- Working towards an inspiring but realistic goal keeps motivation high, and having a specific goal means it is easier to focus on relevant activities. This leads to more prolonged effort and better performance (Locke & Latham, 2002).
- Identifying something that can be changed to improve the current situation and working towards that aim can help to improve sense of self-efficacy (the belief that we can influence or exert control over aspects of our situation) and well-being. Successful achievement of the desired aim can create a sense of satisfaction.
- It is helpful for individuals to realise that however unsatisfactory or difficult the current situation is, there is often something that can be changed to improve it. This can be achieved by looking for solutions and finding practical ways of addressing the difficulty.

Setting goals can be used informally to enhance one's own effectiveness and improve psychological well-being. This approach is routinely used by personal trainers and life coaches, in sport, education, and business, as well as by health professionals. It can be beneficial whenever there is a need or desire to achieve a change in behaviour. Goals might reflect an individual's wish to adopt a healthier or more satisfying lifestyle, or address any other personal needs, or they might relate to managing the impact of health problems on everyday life and everyday activities. Goal-based approaches have been incorporated into behaviour change research, and serve both as a method and as a tool to assess the efficacy of interventions. The approach has been successfully used with different populations, including healthy older people (Clare et al., 2015), frail older people (Rockwood et al., 2003), people with neurological illness (Khan, Pallant, & Turner-Stokes, 2008), people with brain injury (Trombly, Radomski, Trexel, & Burnett-Smith, 2002), people with physical disability (Rushton & Miller, 2002) and people with dementia (Clare et al., 2010).

Introduction to the Bangor Goal-Setting Interview

The Bangor Goal-Setting Interview version 2 (BGSi, Clare et al., 2012) offers a structured format for *eliciting individual goals*, a standardised means of *rating the interviewee's attainment* in relation to the identified goals, and a method of assessing progress with goal attainment over time (see a copy of the BGSi v.2 in Appendix 1). The BGSi draws on the social cognitive theory of behaviour change (Bandura, 2004) and on the concept of motivational interviewing (Rollnick, Butler, Kinnersley, Gregory, & Mash, 2010).

Goals are brief statements about a behaviour that the participant wishes to carry out or achieve.

- The BGSi can be used with any individuals who are able to identify desired changes and rate current levels of goal attainment on a simple numerical scale. This includes healthy individuals and those with health problems, across a range of ages. Here, for convenience, we refer to the person setting goals as *the interviewee*.
- The BGSi can be used to evaluate the extent to which individuals benefit from an intervention or from participation in a programme or research study. It has been successfully used in research studies with older people and people with mild to moderate dementia (Clare et al., 2010; Clare et al., 2015).
- Within the overall structure of the BGSi, a degree of flexibility means that this measure can be adapted for use in various settings. It can complement voluntary sector activities, support application of clinical interventions and provide an outcome measure in research studies and rigorous clinical trials (see section *Adapting the BGSi for use in a research project*).
- Where goal-setting forms part of a therapeutic intervention such as a rehabilitation or reablement intervention, the BGSi will usually be complemented by other assessment measures. For example, therapists may wish to use measures that assess intrinsic capacity alongside the reports of current behaviour included in the BGSi. Identifying where and why specific difficulties arise in engaging in or completing an activity will facilitate the selection of realistic and achievable goals and effective intervention plans.

Central to the BGSi is the *identification of goals*. Goals are brief statements about a behaviour or activity that the individual wishes to carry out, achieve, or manage better. The process of setting goals is a collaborative one. Depending on the setting, the interviewee may set goals in collaboration with a therapist, a volunteer coach/mentor, a researcher, or other appropriate person. Here, for convenience, we refer to the person facilitating the goal-setting process as *the interviewer*. For some people, it may be important to involve a family member or carer in the goal-setting process. For example, for people with dementia, family members or carers can help to prompt or remind the person about what activities he/she has recently engaged in. They may also provide an independent rating of the interviewee's current level of goal attainment. Here, we refer to the person supporting the interviewee as *the informant*.

The following sections of this manual provide information about the use of goal-based approaches and detailed instructions for completing the BGSi with any individual for whom this is appropriate. For the purposes of this manual, the examples we provide are based on a behaviour change intervention for over 50s and a rehabilitation intervention for people with dementia.

The BGSi interview schedule consists of four steps. These are briefly introduced below, with further explanations given in the next section.

BGSi Step 1 – Identifying areas to work on. This step is part of the initial assessment. In a detailed conversation about the interviewee's current situation the areas for improvement are identified within pre-specified domains that are relevant to your intervention, project or setting, or reflect areas in which there is potential to enable the interviewee to enhance performance or functioning (e.g. 'Social engagement', 'Diet').

BGSi Step 2 – Setting goals. This step is part of the initial assessment. Understanding, articulating and describing the problem and what is currently happening makes it possible to define specifically what to aim for in terms of change. It is also important to consider, for any activities or tasks that might form the basis for selected goals, what steps and actions these involve and what skills are required to carry them out, and how this relates to the person's intrinsic capacity. It is vital that any activity or task selected as the basis for a goal is one that the person has the capacity and potential to undertake, either unaided or once appropriate additional resources have been put in place. It is then possible to define what the goal should be (goal statement; e.g. 'I will bake a cake once a week'), what needs to happen in order to agree that the goal has been partially or fully achieved (goal attainment descriptors; e.g. 50% attainment could be using ingredients that someone else has assembled in order to complete the remaining steps involved in baking a cake, on a weekly basis), and how to go about achieving it (identifying barriers, facilitators and resources; e.g. having a tested recipe would be an asset, no previous experience a potential barrier).

BGSi Step 3 – Rating a) current goal attainment, and b) perceived importance and motivation to change. Step 3a is an essential part of both the initial and any follow-up assessments, and step 3b is an optional part of the initial assessment. Step 3 is used to record the interviewee's views about how he/she currently performs in relation to the identified goal (step 3a, attainment rating), and how motivated he/she is to achieve the goal (step 3b, readiness to change and importance of achieving the goal ratings). The interviewee provides ratings made on a simple 10-point Likert-style scale. The number and timing of follow-up assessments to assess progress is flexible and determined by your requirements. Where appropriate, an informant such as a relative or carer, or a therapist, can also be asked to contribute an independent rating of the interviewee's current level of attainment for each goal.

BGSi Step 4 – Assigning goal attainment descriptors. In step 4 (follow-up only) the extent of goal attainment is identified by matching the current attainment level to the goal statement

and the goal attainment descriptors recorded at the initial assessment. Interviewees are asked to describe their current activity in relation to each goal and choose an attainment descriptor that best reflects their current attainment level.

Key features of the BGSi

- The life domains within which goals are to be identified can be selected to fit the intervention, project or setting.
- The number of goals to be set can be determined according to the requirements of your project or setting.
- In order to facilitate goal selection, the interviewee can be asked to rate the personal importance of the identified goals and the current level of readiness to make a change.
- The interviewee's ratings can be augmented where appropriate by informant (e.g. family member or carer) ratings and/or by interviewer or therapist ratings.
- For each goal set, descriptors of anticipated goal attainment levels can be added to assist with subsequent evaluation of progress.
- The number and timing of follow-up assessments can be determined according to the needs of your intervention, project or setting.
- The BGSi recording sheet is available free of charge from the REACH website <http://psychology.exeter.ac.uk/reach/>

The following section provides guidance about each step in more detail.

Administering the BGSi version 2

The BGSi is completed by the interviewer and the interviewee in a collaborative manner, using a conversational format. There are 4 steps involved in the administration of the BGSi, essentially reflecting the stages of a problem-solving process. Each of these steps is outlined in more detail below. See also Appendix 1, The Bangor Goal-Setting Interview.

The BGSi offers a structured format for eliciting individual goals and a standardised method of rating goal attainment.

Step 1: Identifying areas to work on

BGSi Step 1 – Identifying areas to work on. This step is part of the initial assessment. In a detailed conversation about the interviewee’s situation and expectations, the ‘problem’, need or area for improvement within each domain of interest is identified. The conversation could focus on activities the person would like to do that he/she is not currently doing or would like to increase. Alternatively, discussion can be based around activities the person used to do which he/she has stopped doing or is finding more difficult.

For example, when working with people with dementia, you may set out to look specifically at areas affected by memory problems, visuospatial problems, language difficulties or other cognitive problems, and identify the resulting practical issues that are the primary concern for the individual. This might result in a list similar to the following, which can provide the basis for identifying appropriate goals:

Cognitive challenges in early-stage dementia

Memory

- Forgetting what happened the day before; not remembering current address and phone number

Language

- Difficulty finding the right words

Attention

- Losing the thread of a story when reading a novel or a newspaper

Visuospatial

- Not recognising by sight close friends and relatives, or familiar objects

Executive/Planning

- Starting a task without the necessary preparations or materials, or mixing up the sequence of tasks

If you are working with a group of older people with a view to improving their wellbeing, then you might consider areas such as health, diet, exercise, cognitive activities, and social engagement. Discussion might result in a list similar to the following, which could be used as a basis for identifying meaningful and relevant goals:

Challenges to health in later life	
Health	<ul style="list-style-type: none">• High blood pressure or raised cholesterol; smoking
Diet	<ul style="list-style-type: none">• Being overweight; having an unhealthy diet; drinking more than recommended amounts of alcohol
Physical activity	<ul style="list-style-type: none">• Not engaging in regular exercise; mobility problems
Cognitive activity	<ul style="list-style-type: none">• Limited engagement in mental activity
Social engagement	<ul style="list-style-type: none">• Lack of social contact; isolated and lonely

The initial discussion about potential areas for improvement will give you an idea about the difficulties the interviewee is experiencing or the areas in which he/she would like to make positive changes. It is important to remember that different people may experience the same difficulty in different ways, depending on personal circumstances and personality, and so it is important to focus on what is most relevant and meaningful to each person.

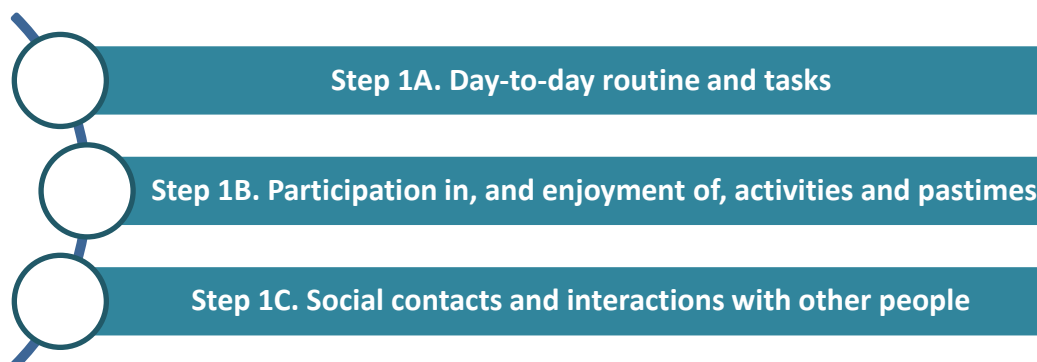
Discussing potential areas for improvement

For each of the domains listed under Step 1, begin with an open question and follow up with more specific prompts, if necessary. For example, the interviewer might initiate discussions using the following general opening questions within each specific domain:

- Is there something you would like to start doing, resume doing, or do more of?
- Are there things you would like to manage better?
- *If relevant:* Are there things that are challenging to do because of your difficulty (use the person's own way of describing this, e.g. poor memory/disability/lack of fitness)?
- How do you cope with your difficulty?

To aid discussion you could use a handout similar to the one presented in Appendix 5. In certain settings it might be appropriate or desirable to include family members or carers in these discussions to enable people to identify goals.

The domains in Step 1 can be specified to reflect the focus of the intervention, project or setting. In the example below the following domains were used with people with dementia:



The interviewer might use the following questions and prompts to facilitate discussion with a person who has difficulties in managing everyday tasks.

Step 1A: How do your difficulties impact on everyday tasks, activities and routines?

This question refers to whether there are difficulties with everyday activities and how the individual manages these. Some questions you might like to ask include:

- Please could you tell me about a typical day?
If relevant:
 - How do your difficulties affect you day-to-day?
 - How do you cope with this?
- What kinds of things do you tend to do around the house/garden (e.g. cooking, cleaning, washing, gardening, paying bills, managing finances)?
 - How do you get on with these?
 - Is there anything that you find difficult?
 - Are there things that you find hard to do and that you would like to manage better?
 - Is there anything that you would like more help with? [*If relevant, look to the family member/carer for suggestions, but remember that the goals should be chosen by the interviewee.*]
 - Has anything changed?*If relevant:*
 - Are there things that are challenging to do because of your difficulty?
- Is there anything you have stopped doing which you would like to start doing again?
- Is there something new you would like to start doing, if you could learn how to do it?
If relevant:
 - What things do you currently do that help with your difficulty? [*Look around the house – are there any aids or strategies already in use e.g. whiteboards, calendars for interviewees with memory difficulties?*]
 - What was it that made you go to the doctor about your [problem]?
 - What changes did people notice in you?
- If you woke up tomorrow and didn't have any difficulties, what would be different?

Step 1B: How do your difficulties impact on the possibility of engaging in pleasurable and meaningful activities?

This question refers to the extent to which the person is able to engage in the kinds of activities he/she enjoys or used to enjoy. Some questions you might like to ask include:

- What kinds of things do you enjoy doing (e.g. walks, clubs, societies, shopping)?
- Are there things you would like to do more of?
- Are there things you have stopped doing or are doing less of, but would like to get back to?
- What do you do for fun?
- What difficulties do you have in doing these activities?
- Does anybody help you to do these activities?

The goal needs to present a challenge that is perceived as manageable and within the participant's capabilities.

Step 1C: How do these difficulties impact on social contacts and relationships?

Some questions you might like to ask the interviewee include:

- Do you meet with friends and family, or mostly family?
 - Has this changed due to your difficulties?
- Sometimes people find it hard to *[insert something relevant to your intervention, project, or setting, e.g. concentrate during conversations]* – is that something you have found?

Motivation to change

It is essential to establish which difficulties or areas for improvement are most relevant to the interviewee and therefore likely to develop into suitable goals. Explore how motivated the person is to change the way s/he currently manages life, whether it is overcoming a specific problem or making some improvements in everyday life. Identifying areas where the person is prepared to make an effort in order to achieve the change will help with setting personally meaningful goals in Step 2 of the BGSi. A suitable goal will be the one that falls within the area where the person thinks change is important and hence is motivated to work to achieve that change.

Figure 1. Example of completed BGSi Step 1.

STEP 1: IDENTIFYING AREAS TO ADDRESS	
<p>Select areas that are relevant to the current study or intervention, or the individual's needs (the form allows for up to five, but more can be added if needed). Examples might be physical activity, mental activity, diet, etc. Discuss each given area with the interviewee and identify issues that might form a basis for goals.</p> <p>For each area for improvement, discuss with interviewee the importance of making changes and readiness to make changes in this area. This will allow you to establish which difficulties or areas for improvement are most relevant to the interviewee and therefore likely to develop into a suitable goal.</p>	
Area 1 (specify the area):	<u>Day-to-day routine and tasks</u>
	<p>Anne and her husband have a routine in place to manage various household chores, with Anne preparing most of the (simple) meals, but relying on her husband to plan the meals and to do grocery shopping. She would like to do shopping trips, but they are both afraid that she will get lost in the shop. Anne finds it difficult to keep track of the planned events, despite being reminded by her husband the night before and frequently throughout the day.</p>
Area 2 (specify the area):	<u>Participation in and enjoyment of activities and pastimes</u>
	<p>Anne enjoys listening to music and watching television, and can operate the CD player by herself and know how to record TV programmes. The main activities she used to enjoy were gardening and short walks in the neighbourhood, but she is now avoiding these as she would be embarrassed not to recall her neighbour's names if she meets them.</p>

Step 2: Setting goals

Once you have identified some areas which the interviewee would like to be able to manage better, the second stage of the BGSi involves revisiting each of the domains and eliciting specific issues that will form behavioural goals.

The goal needs to present a challenge that is perceived as manageable and within the interviewee's capabilities. It is important to understand both the capacity of the person and the demands of the activity; this will make it possible to identify where there is a mismatch and what extra support is needed to address this mismatch. For example, a person with cognitive impairment may wish to 'take up reading again' having come to feel that this previously enjoyed activity is now too arduous. In this case, the person is able to read perfectly, but finds it difficult to concentrate for long periods. Following discussion about what this means to the person, the overall agreed goal might be to 'read the newspaper each day' or to 'read for at least five minutes each day'.

The BGSi record form asks you to state the goal and give a brief summary of current attainment in relation to the goal; for example, if the goal is to 'read the newspaper each day', current attainment might be 'looks at the main headline but does not read any of the articles'. It is important to write an accurate description of current activity or attainment in relation to the goal, as you will need to refer to this when completing the attainment rating (see Step 3). It is also useful to consider how the person's context or environment supports the activity; for example, where the goal is to read the newspaper, is the newspaper delivered, or does the person have to go to the store to buy it? The former will make goal attainment more likely.

Goals are brief statements about a behaviour or response that the person wishes to carry out or achieve. They are statements about **observable, measurable behaviour**, and not about feelings or wishes. It is important that goals are **realistic and potentially achievable** within the time-period that you define as relevant. This may involve developing a broadly expressed objective into a precise and focussed goal, confirming to SMART principles. This means the goal should be:

- **Specific**
- **Measurable**
- **Attainable**
- **Relevant/Reasonable**
- **Time-bound**

SMART characteristics are discussed further below.

*Talk positively.
For example, ask about new things that could be achieved or improved, rather than just problems and issues to address.*

Setting SMART goals

As noted above, SMART goals are specific, measurable, attainable, relevant/reasonable and time-bound. Here we offer advice on how to ensure that you set goals that meet each of these criteria.

Examples of clearly expressed, specific goal statements:

- I will bake a cake once a week.
- I will find my clothes in the morning without asking my wife.
- I will eat fruit and nuts as a snack instead of biscuits and cakes.
- I will enrol in an exercise class in order to socialise with new people.
- I will do a newspaper crossword three times per week.
- I will put my shoes and socks on without help.
- I will do a three mile walk three times a week.
- I will learn to send text messages to contact my grandson once a week.
- I will be able to call my wife from my mobile phone.
- I will be able to say the names of my four closest neighbours.
- I will read for at least five minutes each day.
- I will take my glasses, wallet and mobile phone with me whenever I go out.

Specific

It is important that goals are specific so that there is no ambiguity as to what the interviewee aims to achieve. Specific goals will help in documenting change and evaluating progress accurately.

- **Be clear about what exactly is to be achieved**, so that it is possible to evaluate how much progress has been made.

Examples:

- *'I will learn to use an iPad to send emails to my grandchildren'* is more specific than *'I will use an iPad'*. Establish what the challenge is for the participant and what exactly the participant wants to do with the iPad.
- *'I will knit a scarf following a written pattern'* is more specific than *'I will be able to regain some of the skills that I had in knitting'*. It is important to state the specific outcome that the participant wants to achieve, ensuring that this is realistic.

- **Ensure that goal statements are expressed with absolute clarity and precision.** This will be beneficial for the interviewee and interviewer, so it is clear what the interviewee aims to achieve without additional clarification.

Examples:

- *'When I am getting ready in the morning I will be able to find my keys and purse'* is clearer than *'I will locate the items I need to get ready in the morning'*. It should be unambiguous what the goal is; in this case, we need to know whether the participant wants to locate items that have to be got ready, or wants to locate items that he/she needs in order to get him/herself ready.
- *'I will manage my appointments without any double-booking'* expresses the goal more clearly than *'I will have an effective strategy not to double book appointments/arrangements as they arise'*. It is preferable to word a goal positively.
- *'I will be able to attach documents to work-related emails and send them off'* is more precise than *'I will be able to send attachments in relation to my work'*.

Measurable

A goal has to be measurable to make it possible to evaluate whether it has been achieved or not, and how much progress has been made. It is important that goals are formulated in such a way that a single attainment rating score will provide meaningful and accurate information about current attainment in relation to the goal, both when setting the goal and when evaluating progress at a later stage.

- **Try to express one idea per goal.** Sometimes statements about behaviour have two elements to them and can be split into two separate goals. Ensure that it is clear what the actual goal is. For example, if the goal is to do a task without being distracted, is the aim to be able to do the task, or to deal better with distraction? It may be that there are actually two goals in one, which could be separated out and which may need to be evaluated separately.

Example:

- *'I will be able to use the phone (landline and mobile) to make and answer calls'* could be split into two goals relating to making and answering calls, or two goals relating to use of landline and mobile, or even four goals relating to making and answering calls with the two different types of phone.

- **Ensure that the goal addresses only one behaviour.** One issue may yield more than one goal, and it is best to separate these out rather than including multiple behaviours in a single goal. It will be hard to measure progress with a goal containing more than one behaviour if level of attainment differs for the different behaviours.

- **Ensure that goals are expressed in behavioural terms.** It is best where possible to avoid *descriptions* of emotions, unless what the interviewee specifically wants to achieve is the experience of an emotion. Ideally the goal should specify a behaviour that could be observed by another person.

Example:

- *'I will walk up two flights of stairs without getting out of breath'* is an observable indication of fitness level, while *'I will be happy with my fitness level'* refers to emotions that may be difficult to measure.

Attainable

It is paramount that a goal represents an objective that can be achieved. Setting SMART goals helps in evaluating progress, but it is the subsequent achievement of the goal that is crucial.

- **Goals need to be realistic.** A goal must represent an objective that the person is likely to achieve with a plan of action that is in line with reality, within the availability of resources, motivation and time. 'Thinking big' may inspire and boost motivation, but goals must represent objectives that are realistically achievable for the interviewee.

Example:

- *'I will build up the endurance to run for 5 miles.'* While many people would be able to finish a marathon with appropriate training, such a goal would only be realistic for a highly motivated and relatively fit person. For someone who wants to improve his/her fitness level, but with little time or motivation to do physical exercise, a rigorous training schedule would be overwhelming and simply not within reach.

- **The person must be motivated to work toward a goal.** High motivation is crucial for achieving the goal, but the level of demand needs to be carefully considered in the context of individual abilities and limitations. An ambitious goal will usually be more appealing, but can also intimidate those who have less faith in their abilities or more insight into their own limitations.

Example:

- *'I will do a three mile walk three times a week.'* For a sedentary overweight person a goal of doing a one-mile walk three times a week may be challenging and motivating, but also within reach over a reasonable timeframe.

- **Goals need to account for individual limitations and/or underlying impairments.** Expectations need to be managed cautiously when there is some underlying impairment impacting on a person's functioning. It is crucial to be realistic and make sure that the aims expressed in the goals are clearly specified to take account of potential limitations that may not be overcome. In some cases it may not be possible to address problems that directly result from an underlying impairment so as to entirely remove the problem, but it should always be possible to work on ways of dealing with the consequences of an impairment. It may be difficult to explain this to the interviewee in a single interview session, but it will help if goals are expressed in a way that allows for this process.

Examples:

- For a person with dementia, remembering the names of everyone he/she meets may simply not be achievable. If remembering names is crucial for the participant, then a limited set of names will need to be specified (e.g. *'I will be able to correctly name each of my grandchildren'*).
- A person with dementia may struggle to find the right word and this will impact on his/her ability to interact with people. It may not be possible to deal with the underlying impairment, and engaging fully in conversations may always be difficult, but it might be possible to find a way to continue in a conversation despite not being able to find the right word (e.g. *'I will continue a conversation for five minutes once a day'*).

Relevant/Reasonable

Making sure that a goal is relevant to the person and his/her circumstances is critical for developing motivation to work toward that goal and for achieving the overall objectives of the intervention. A suitable goal is one that offers scope for improvement, as reflected by a low attainment rating in Step 3, and where the interviewee thinks a change is important and feels ready to make the change, as reflected in high ratings of readiness to change and importance of achieving the goal in Step 3 (see below *Step 3: Assessing current goal attainment and motivation to achieve the goal, and evaluation progress*).

- **Goals need to be personally meaningful and reflect the person's important needs.** A well thought-through goal that addresses a relevant area for improvement has the potential to bring about a helpful change in behaviour and an improvement in health, social engagement and/or quality of life overall.

Examples:

- *'I will be able to call my wife from my mobile phone'* and/or *'I will be able to answer calls from my wife on my mobile phone'* are two well-expressed goals that are personally meaningful to a person with dementia who is determined to maintain his independence. Being able to stay in touch with his family when going out on his own may improve his confidence to go out and increase participation in social activities.
- *'I will attend weekly fitness classes in my local Community Centre.'* A person who wants to adopt a healthier lifestyle and improve his/her fitness level, but does not enjoy solitary walks or exercising at home, may feel more motivated to join and regularly attend an exercise class. Such a goal is more likely to be achieved, meaning that the overall level of fitness is also more likely to be improved.

Time-bound

A specific timeframe for achieving a goal is helpful for maintaining motivation and verifying progress. When there is a set time available for evaluation of progress, this needs to be made clear to interviewees and goals need to be tied to that specific time period. It may not be necessary to make reference to the timeframe in each goal statement, but the goal must be achievable within the time available, in terms of both complexity or challenge and the opportunity to engage in any planned activity. For example, growing vegetables may not be a suitable goal for winter months.

Example:

- *'I will attend weekly fitness classes in my local Community Centre'* could be an appropriate goal for someone wishing to increase their activity level in the subsequent six months. However, *'I will sign up for a local fitness class'* will be more appropriate if the goal is to be reassessed in a couple of weeks and the person needs to do some research to find out about available classes.

Formulating goals

It is important that goals are worded carefully to aid comprehension and ease of rating goal attainment again when progress is evaluated at a subsequent date.

- **Phrase the goal in the first person to make it more personal for the interviewee.**

Example:

- *'I will call my grandchildren by the right names'* is direct and less formal, and will be more meaningful for the participant than *'The interviewee will use correct names when addressing his family members'*.

- **Formulate goals based on the outcome the person wants to achieve**, so as to leave open the possibility that the goal can be achieved through various methods. This is particularly relevant in the context of cognitive impairment where improvement could be achieved with restorative (e.g. relearning) or compensatory (e.g. using a strategy) methods. It is sometimes tempting to word goals as *'I will be able to...'* or *'I will have a strategy for...'*, but saying *'I will...'* is more direct and indicates exactly what the person will do, and also encompasses situations the difficulty may relate to low motivation rather than limited skills. *'I will be able to...'* should only be used when directly relevant.

Example:

- *'I will bake a cake, biscuits or scones once a week, using a recipe from a cookery book'* is more direct and clear than *'I will have a strategy to be able to bake something sweet such as a cake, biscuits or scones by referring to a cook book once a week within 3 months'*. If the latter goal is achieved successfully, then the participant will have the tools, knowledge and initiation/motivation to bake a cake, biscuits or scones, but not necessarily have actually baked anything. In contrast, if the former goal is achieved, then the participant will have baked a cake, biscuits or scones within the last seven days. As you can see, these are two different outcomes, and so it is important that the goal precisely states what the participant wants to achieve, and this is firstly done by pinpointing the barrier(s) to achieving the goal at the initial meeting.

- **Goals should be stated positively.** Goals should represent something the interviewee wants to do, or do more of, rather than something the interviewee wants to stop doing or do less of. The goal statement needs to refer to positive actions the person will take in order to achieve the outcome. A wish to stop doing something can often be translated into a positive statement about what the interviewee does want to do.

Example:

- *'I will eat an apple or orange instead of a chocolate bar for my mid-morning snack'* is better than *'I will stop eating biscuits'* or a general statement *'I will lose weight'*.

Number of goals

The number of goals to be set is flexible. You may want to select a fixed number (e.g. 3) or a range (e.g. 3 – 5), but it is usually helpful to specify a minimum and/or maximum number of goals. It would normally be preferable to have goals in more than one domain, but you may decide that in the context of your intervention, project or setting the elicited goals could all be in one area; for example, if you are focusing on increasing physical activity then you would want all the goals to relate to that aim.

Goal attainment descriptors (%)

You may find it helpful to use goal attainment descriptors. If so, in addition to obtaining a clear definition of what would represent full achievement of the goal (100%), you will be asked to provide descriptors of 25%, 50%, and 75% goal attainment to define different degrees of progress. Goal attainment of 0% would indicate no change from current attainment or deterioration in attainment. Goal attainment descriptors can be discussed with interviewees in terms of what will be different when, or how we will know when, they are a quarter of the way, half-way or three-quarters of the way to achieving the goal. This should reflect how the task is broken down into steps or stages. Partial achievement would typically relate to being able to complete some but not all of the steps involved in doing the task. For baking a cake stages might be 1) selecting the recipe, 2) buying the ingredients needed, 3) assembling the ingredients in the correct quantities ready for baking, 4) turning the oven on, 5) following the instructions about combining the ingredients, 6) putting the cake mix in the tin, 6) putting it in the oven, 6) getting the cake out of the oven at the right time, 7) leaving the cake to cool, etc. Partial achievement would reflect doing some but not all of these steps. For example, if someone else got the ingredients ready the person could do the rest.

Examples of goal attainment descriptors:

Goal statement (100% attainment): *I will attend weekly fitness classes at my local Community Centre (all but two or three classes over the next six months).*

- 0% attainment: As per description of current attainment in Step 2
- 25% attainment: *I will sign up for fitness classes and attend one or two classes.*
- 50% attainment: *I will attend at least one fitness class a month.*
- 75% attainment: *I will attend weekly fitness classes two to three times a month.*
- 100% attainment: As per goal statement *in Step 2*

Barriers, facilitators and resources

Barriers and facilitators to achieving the goal can then be discussed with an emphasis on resources that will help in overcoming obstacles and achieving the goal. The problem-solving process begins with formulating as many ideas as possible about how to achieve the goal, evaluating these possible options and choosing the most feasible one in light of the identified

barriers, facilitators and resources, and then trying to implement the strategy. If the strategy works well, it can be maintained and refined; if the strategy does not work well, then a different option can be tried, until a workable solution is found.

Figure 2. Example of completed BGSi Step 2.

STEP 2: SETTING SMART GOALS	
<p>With the overview gained in Step 1 in mind, return to each of the selected areas (or those most relevant) and negotiate the specific SMART goals. SMART goals are Specific, Measurable, Achievable, Relevant/Reasonable, and Time-bound (achievable within a realistic time-frame). The form allows for up to 5 goals but additional goals can be added if required. State each goal in the first person in clear behavioural terms, describing full goal attainment ('I will....').</p> <p>The interviewee should then be asked to describe current attainment in relation to the goal; the informant's description could also be sought where appropriate. Descriptors of 25%, 50%, and 75% goal attainment may be added; this can be discussed with the interviewee in terms of what will be different when, or how we will know when, he/she is a quarter of the way, half-way or three-quarters of the way to achieving the goal. Barriers and facilitators to achieving the goal can then be discussed with an emphasis on resources that will help in overcoming obstacles and achieving the goal.</p>	
Goal identification: Goal 1	
<p>Goal statement (100% goal attainment): <i>'I will be able to contact my husband with my mobile phone, if I get lost in the shop'</i></p> <p>Description of current attainment (interviewee): <i>I have a mobile phone but it is not charged and I don't use it</i></p> <p>Description of current attainment (informant): <i>Anne is not using her mobile phone at all</i></p>	
Goal attainment descriptors	
<p>25% attainment: <i>I have my mobile phone with me, switched on, and with battery charged</i></p> <p>50% attainment: <i>I will know how to answer the call from my husband</i></p> <p>75% attainment: <i>I will know how to answer the phone and to call my husband in a quiet place and when not stressed</i></p>	
Barriers, facilitators and resources	
<ul style="list-style-type: none"> ❖ What do I need to do to reach this goal? <i>I need to have a strategy to keep the phone with me and find out how to operate the phone.</i> ❖ What might get in the way of reaching this goal? <i>I may forget the phone, I'm very anxious and it is difficult for me to focus when I lose sight of my husband in the shop.</i> ❖ What resources do I have to help me meet this goal? <i>I have a mobile phone that I can use and my husband is keen to help me learn how to use it.</i> ❖ What will help me to overcome obstacles and achieve this goal? <i>Having visual reminders about the phone will help me remember to charge the phone and take it with me.</i> 	

Step 3: Assessing current goal attainment and motivation to achieve the goal, and evaluation progress

In Step 3 of the BGSi, the interviewee is asked to rate, for each goal agreed in Step 2, his/her current level of attainment (Step 3a). All ratings are made on a simple 10-point scale, with a lower score indicating poorer attainment.

Goals are first rated during the initial assessment; this baseline score will serve as a point of reference for future evaluation of progress. At subsequent follow-up time-points the goals are rated again; a follow-up score provides an indication of behaviour change or progress in relation to the goal, e.g. a rating of 10 means that the person is now performing at the optimal desired level. A progress score can be calculated by comparing baseline and follow-up scores (see below for how to calculate a progress score).

The interviewee may also be asked to rate his/her feelings of readiness to make changes and the perceived importance of making changes (Step 3b, optional). This is to assess the individual's motivation to work towards the goal. The readiness to change and importance of achieving the goal are assessed only at the initial interview. The attainment rating is repeated at follow-up time-points. Both ratings are described in more detail below.

Step 3a – Attainment

In Step 3a the interviewee describes his/her current activity and rates his/her current functioning in relation to each goal. Attainment in this sense relates to what the interviewee is currently doing, and not what the interviewee thinks he/she might be able to do if he/she were to engage in the given activity (see also *Discussion of the attainment rating scale*). The attainment rating is completed at baseline assessment and repeated at follow-up time-points.

The purpose of the attainment rating is to appraise current actual performance on the goal – current 'doing' or 'not doing' of the activity.

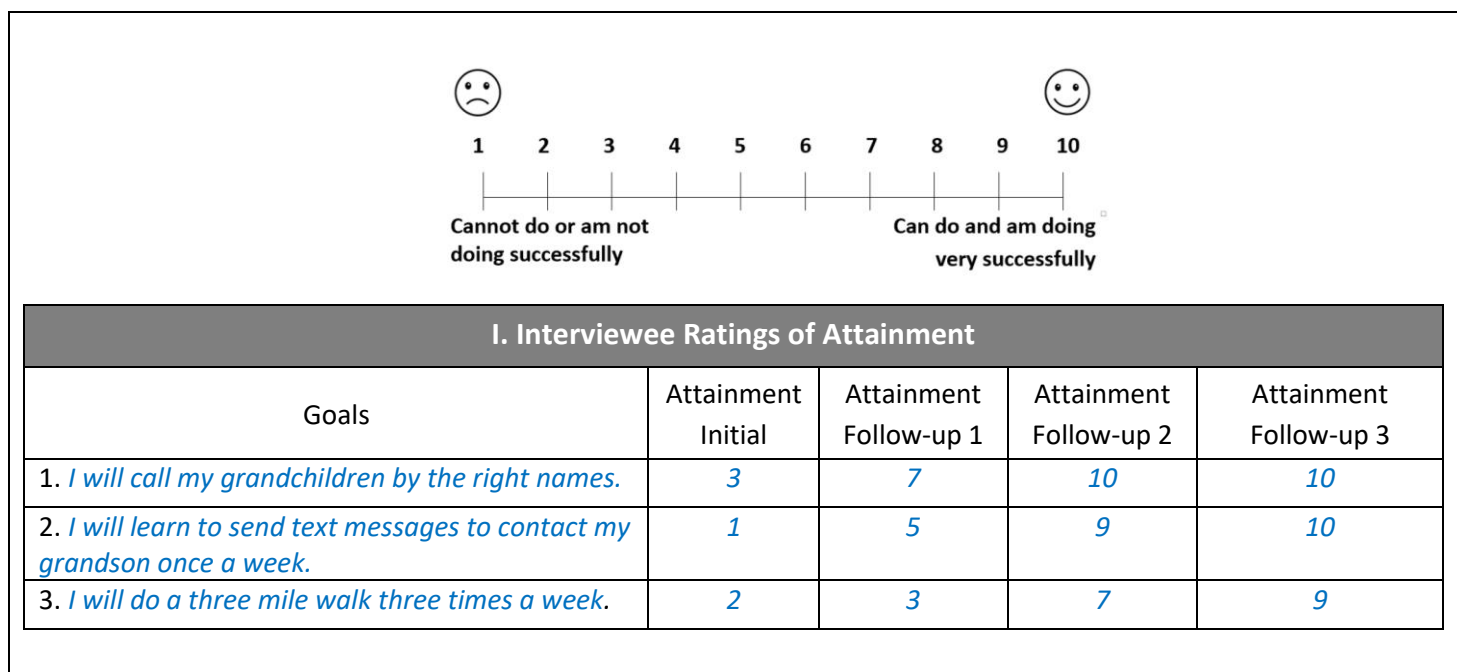
The **attainment ratings** range from 1 (cannot do or am not doing successfully) to 10 (can do and am doing very successfully), although the wording of the descriptors can be amended as appropriate. A progress score can be calculated for the goals by comparing initial and follow-up ratings (see *below Evaluating progress*).

In the example in Figure 3, a person with dementia indicated as her goal that she would like to call her grandchildren by the right names. At the time of the initial assessment she could only correctly recall the name of her oldest grandson and not the other four grandchildren that were born more recently. She rated her attainment at the initial assessment (remembering 1 out of 5 names) as 3. At the first follow-up, after working on this goal with the therapist, she was able to correctly recall names of all grandchildren most of the time, but

not every time, and therefore decided to give herself a rating of 7. By the time of the two subsequent assessments she was reliably able to recall all the names and rated her attainment as 10.

To help explain the scales and complete the ratings you can use a visual representation of the rating scales (see examples below, and in Appendices 2-4).

Figure 3. Example of a visual representation of the attainment rating scale and completed goal attainment rating in BGSi Step 3.



Where appropriate, an informant such as a relative or carer can be asked to make an independent rating of the interviewee’s current level of attainment for each goal on the same 10-point scale. This can be done both when setting the goals and when evaluating subsequent progress.

Step 3b – Motivation

Once you have identified the goals and established current level of attainment, ask the interviewee to rate how important the identified problem(s) are to him/her and how ready he/she is to make changes in relation to these problems in order to improve the situation. These ratings provide a check on the appropriateness of the goals that are being identified, along with useful information that can assist in planning how to address the identified goals. These two ratings are useful for establishing how motivated people are to change the way they currently manage their life, whether overcoming a specific problem or making some improvements in everyday life. Identifying relevant goals which have high ratings of importance and readiness to change will help ensuring that goals are personally meaningful and relevant. These ratings will also provide quantitative information about how motivated the person is to achieve the change, which may impact on the degree of progress that can be

made, or may even suggest that the goal is unsuitable due to lack of motivation and that a different goal should be negotiated.

Complete the importance and readiness to change ratings for each goal.

- The **readiness to change ratings** can range from 1 (not ready to work on the goal) to 10 (extremely ready to work on the goal). This rating is completed at the initial interview only.
- The **importance ratings** can range from 1 (not important at all to achieve this goal) to 10 (extremely important to achieve this goal). This rating is completed at the initial interview only.

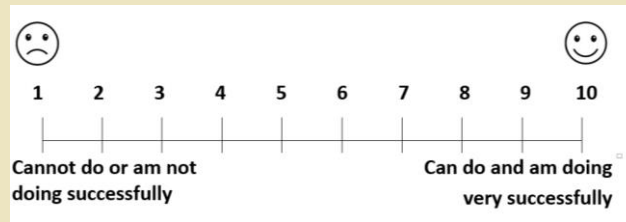
High attainment ratings at baseline

Avoid goals where the attainment rating is high and/or motivation to work on the goal is low. If the interviewee gives a very high rating of attainment (i.e. 8, 9, or 10), this indicates the goal is probably not suitable to work on, as the person feels he/she is already performing this task reasonably well. Similarly, low ratings of readiness to change and importance of achieving the goal (i.e. 1, 2, or 3) indicate that the motivation to work on this goal may be low and it may be difficult to achieve improvement. Try to reformulate the goal statement or look for a different goal. Ideally, select goals with Attainment ratings of 6 or below, and Readiness to Change/Importance of Achieving the Goal ratings of 4 and higher.

Discussion of the attainment rating scale

A certain level of sensitivity and creativity is needed when explaining the attainment rating scale to the interviewee to make sure that he/she understands the concept of the scales. If the goal refers to an activity that the person is already undertaking, it will be helpful to specify that a lower rating means that he/she is not performing the task *as often* or *as efficiently* as he/she would like. If the person is currently not engaging in any activity relating to the goal he/she may be inclined to rate attainment on the basis of what he/she thinks would be the case if he/she did engage in goal-related activity. The point here, however, is that the person is not currently engaging in the activity and therefore they should rate on the basis of this lack of activity. As mentioned above, the idea of the attainment rating is to rate current actual performance in relation to the goal, current doing or not doing of the given activity. This is not about what the interviewee thinks he/she might be able to do if he/she were to engage in the given activity. As each goal is different, it is not possible to have a standard script for explaining the rating and recording responses. However, to help with improving consistency in the approach taken to explain the attainment rating scale, some suggestions and examples are listed below.

How to explain the goal attainment scale and complete goal attainment rating



1. Remind about current situation: Use the interviewee's description of the current situation, as written down in Step 2.

2. Remind about the goal: Use the interviewee's description of the goal, again as per Step 2 notes.

3. Explain ratings of 10 and 1: Explain that on this scale 10 means that the person does exactly what was specified as the goal. You can read the goal statement and stress that this would be a rating of 10. Then add that on this scale 1 means that the person cannot do or is not currently doing the goal-related activity at all. Depending on the nature of the goal, describe what the rating of 1 would be (e.g. not baking at all).

4. Further explanations: Give further explanations as needed. To assist people with cognitive difficulties you may want to arrange for these explanations to be written down when explaining the rating.

- People who score between 1 and 3...
 - ... would like to do it but are not doing it
 - ... are not managing to do it
 - ... could improve/be better at it
 - ... could do it more often
 - ... have room for improvement
- People who score between 8 and 10...
 - ... perform as well as they can
 - ... do it as often as they need to or would like
 - ... have little or no room for improvement

Example: *You've told me that you would like to bake a cake every week, but at the moment whenever you try to bake a cake you make a start but then get in a muddle and give up. We so agreed that we could tackle this and that baking a cake once a week will be your goal. On this scale 10 means that you are baking one cake a week and 1 means that you are not baking any cakes at all. How would you rate your baking on this scale?*

Evaluating progress

To assess the extent and direction of progress, the attainment rating is repeated at subsequent time-points. The ratings at follow-up can be made with or without a reminder of the ratings made initially, as both methods have advantages and disadvantages. Therefore, we recommend that you decide which of these methods is more suitable for your intervention, project or setting, and then use it consistently.

Calculating a change score: Attainment scores

To evaluate progress or change, calculate differences in the attainment scores. The attainment rating is obtained for each individual goal at the time of each evaluation. An overall mean rating for attainment across goals is calculated at any given evaluation point by dividing the sum of the ratings for all goals identified by the number of goals set. A change score can then be calculated by subtracting the mean rating at the initial interview from the mean rating at the follow-up evaluation (see Figure 4 below).

- Mean attainment rating = Sum of attainment ratings *divided by* Number of goals set
- Change in attainment rating = Mean attainment rating at follow-up *minus* Mean attainment rating at initial interview

Possible values of the *Change in attainment* range from **-9**, when the initial rating deteriorates to 1 from an initial value of 10, to **+9**, when the rating improves to 10 from an initial value of 1. Negative values indicate deterioration in attainment rating, and positive values indicate improvement in attainment rating. A value of 0 indicates no change. See example below.

Figure 4. Example of calculations of change scores at follow-up assessments in BGSi Step 3.

I. Interviewee Ratings of Attainment				
Goals	Attainment Initial	Attainment Follow-up 1	Attainment Follow-up 2	Attainment Follow-up 3
1. <i>I will call my grandchildren by the right names.</i>	3	7	10	10
2. <i>I will learn to send text messages to contact my grandson once a week.</i>	1	5	10	10
3. <i>I will do a three mile walk three times a week.</i>	2	3	10	10
Interviewee mean attainment scores				
Mean attainment score = $\frac{\text{Sum of attainment scores}}{\text{Number of goals set}}$				
Initial	Follow-up 1	Follow-up 2	Follow-up 3	
$\frac{(3 + 1 + 2)}{3 \text{ (no of goals)}} = 2$	$\frac{(7 + 5 + 4)}{3} = 3$	$\frac{(10 + 10 + 10)}{3} = 10$	$\frac{(10 + 10 + 10)}{3} = 10$	
Interviewee change in attainment scores				
Change score = (Mean attainment score at follow up) – (Mean attainment score at initial assessment)				
	(Follow-up 1) – (Initial)	(Follow-up 2) – (Initial)	(Follow-up 3) – (Initial)	
Change scores:	$3 - 2 = 1$	$10 - 2 = 8$	$10 - 2 = 8$	

Step 4: Assigning goal attainment descriptors

At the follow-up evaluation, ask the interviewee to describe his/her current activity in relation to each goal. You may also note the informant's descriptions and you may make your own observations or obtain the views of anyone involved in supporting the person's progress with attaining the goals.

For each goal, decide the extent of goal attainment (0%, 25%, 50%, 75% or 100%) by matching the current activity to the goal statement and goal attainment descriptors recorded in the initial interview.

Assigning a goal attainment descriptor:

Goal statement (100% attainment): *I will attend weekly fitness classes at my local Community Centre (all but two or three classes over the next six months).*

If a person reported attending 7 classes over a 6-month period the goal would be scored as 50% achieved, as 7 classes is close to attending 1 class a month.

- 0% attainment: As per description of current attainment in Step 2
- 25% attainment: *I will sign up for fitness classes and attend one or two classes.*
- **50% attainment: *I will attend at least one fitness class a month.***
- 75% attainment: *I will attend weekly fitness classes two to three times a month.*
- 100% attainment: As per goal statement in Step 2

Tips for using the BGSi

In this section we present some scenarios that you may encounter when completing the BGSi with interviewees and suggest some solutions to overcoming difficulties.

What if an interviewee cannot identify any goals?

While the majority of people will easily identify suitable goals, for some people it may be more challenging. It is important to understand possible reasons for difficulties in identifying goals in order to manage the process of setting goals sensitively.

When the BGSi is used as a way of evaluating the effects of an intervention, motivation to engage in the goal-setting process provides important information about whether the intervention is suitable for the individual. Inability to identify suitable goals raises questions about whether (a) the interviewee actually needs the intervention, (b) the goal-oriented approach is the most helpful approach to address the person's difficulties, and (c) the person understands the concept of goal-setting and the aims of the intervention.

Change *per se* may be perceived as threatening and undesired. Discussions about introducing new solutions and strategies to remedy problems may bring resistance if you focus on *changes* that may be brought about by introducing *new* strategies. In such situations referring to ways of making the most of the person's preferred strategies or activities may elicit the desired outcome. For some people, aiming to maintain current functioning may be a suitable goal. They might be interested in keeping the skills they have or learning new techniques to achieve tasks they encounter during daily life.

People may have limited motivation to identify goals they would like to work on if they underestimate what could be achieved, and/or feel disheartened by previous unsuccessful attempts to address the problem. While it is important to acknowledge previous efforts, specific examples of what can be done will normally help boost motivation.

Some people may simply be functioning optimally for their circumstances, for example if their difficulties are not very significant and/or if they already have their own strategies to overcome any difficulties. However, difficulties in identifying possible goals may also arise from a lack of acknowledgement that there is scope for improvement or that there is a problem or difficulty.

- People may choose not to disclose the full extent of the impact that their difficulties have on their lives, particularly when it comes to rating attainment. It is sometimes helpful to acknowledge the pressure to appear to be coping, and encourage the person to name the difficulty. For example, you could facilitate discussion by saying, 'I know you may think you ought to be coping well, but it is fine to admit when you are not.'

- It may also be that people do not actually recognise their difficulties and therefore deny having any problems, even when these difficulties are significant enough to be obvious to others (e.g. family members and friends). This is most likely to arise in the context of cognitive impairment.

Examples:

- A person with dementia may describe some cognitive difficulties and/or express dissatisfaction with his social interactions, but then say these do not cause significant problems and/or do not matter enough to warrant any specific action to improve the situation. He might mention that he cannot remember how to use the microwave to make a hot drink or how to use the remote control to change channels on the television, but may feel that these are trivial daily annoyances that do not cause concern because he can ask his wife to perform these tasks for him. Therefore, the tasks are still being completed (the hot drink can still be made and the television channel can be changed), but rather than completing these tasks himself, his new strategy is to have his wife perform these tasks. To the participant, forgetting which buttons to press on the microwave and on the television remote controller do not require support/intervention from a therapist. His wife, of course, may take a different view. In this situation a discussion with both members of the couple may help to identify a suitable approach.

In general, when there are difficulties in identifying potential goals it can be helpful to spread the process of setting goals over more than one interview session. This will give the person more time to reflect on his/her everyday life and any difficulties he/she experiences. In this situation you could adopt the following procedure:

- **Visit 1:** During the first session introduce the BGSi and the idea of setting goals, and ask the interviewee a variety of questions about his/her daily life (see the section *Discussing potential areas for improvement* for examples of the questions you can ask). Try to identify some possible areas to work on (Step 1 of the BGSi). It may be helpful to ask the interviewee to complete a handout or diary before the second visit (**see Appendix 5. An example of a handout to facilitate goal identification**).
- **Visit 2:** Returning for a second visit gives additional time to reflect on the initial discussion and to plan further questions or possible goals to consider. You may also find it useful to seek advice from colleagues with expertise in the goal-setting process and/or the type of problems specific to your target group (e.g. memory difficulties in

Split the process of setting goals over two visits and ask the participant to work on the 'Things you would like to do' handout.

people with dementia). At the second visit you can discuss the handout and ask further questions.

Extra time is usually all that interviewees need in order to make progress with identifying potential goals. However, some people might conclude that they (a) do not want to identify possible goals, (b) are unable to identify possible goals, and/or (c) do not want to work on any goals. This must be respected.

What if a family member or carer suggests goals to the interviewee?

When involving both the interviewee and his/her family member or carer, discussing potential goals can provide a platform for the family member or carer to mention any issues that he/she has witnessed or envisages, and perhaps also to voice any difficulties or concerns that he/she has noticed within the relationship with the interviewee.

Example:

- In a project involving people with dementia, a carer might share with the interviewer that her husband asks several times throughout the day 'what day is it?' or 'what are we doing today?' The wife might find this irritating and feel that at times the experience creates tension between herself and her husband. For some family members or carers, the goal-setting process might provide the first appropriate opportunity for the family member or carer to highlight such difficulties and the subsequent impact on his/her own wellbeing and feelings towards the interviewee.

By providing a friendly and reassuring atmosphere, you can facilitate open discussion and engagement in the goal-setting process. Although the interviewee may not have proposed 'reduce repetitive questioning to my wife' as a goal, through supportive questioning, after being enlightened to this situation, the person with dementia may feel motivated to set this goal in order to reduce his wife's stress level and improve the quality of the relationship. However, it is vital to check that each goal is personally meaningful to the interviewee (not just to the family member or carer) as it will be the interviewee who, if receiving support to achieve the goals as part of an intervention, will be required to put effort into working towards completing the goal. Therefore, the interviewee needs to have some motivation to attain the goal.

Adapting the BGSi for use in a research project

The BGSi can be adapted for different kinds of uses and for various contexts, including research. If you plan to use the BGSi in a research study, there are a number of decisions that need to be made beforehand in order to prepare the BGSi schedule for use by interviewers. These are as follows:

- In Step 1, the domains to be considered should be selected to match the specific project objectives and target population. Within these domains it would be useful to identify some examples of goals or areas to help facilitate the interview process and the identification of goals. For example, in a project aimed at promoting healthy lifestyles, domains might include physical activity, diet and nutrition, mental fitness, and engagement in social activities, while in a project aimed at supporting functioning in people with early-stage dementia, domains might include managing memory problems, day-to-day activities and tasks, and participation in, and enjoyment of, activities and pastimes.
- In Step 2, the minimum and maximum number of goals to be elicited can be specified.
- Where the process of initial goal-setting is separate to a subsequent intervention or therapy programme, it may be more appropriate to incorporate the definition of goal attainment descriptors and discussion about strategies to achieve the goal into the intervention protocol rather than including these in the initial goal setting process. This will help standardise the goal setting process for the study and avoid difficulties where multiple interviewers are involved.
- In Step 3, the types of ratings to be obtained can be specified. For example, in a project where interviewees have cognitive impairments, informant or therapist ratings might be included alongside the participant's self-ratings. A decision can also be made about whether to include the use of 25%, 50%, and 75% goal attainment descriptors.
- The ratings of each goal in Step 3 are made on a 10-point Likert-style scale, with 1 indicating poor current attainment and 10 indicating excellent current attainment. The exact description of what the ratings of 1 and 10 mean can be tailored to reflect the nature of your project.
- In Steps 3 and 4, the number and timing of follow-up assessments can be specified to match the project needs or study design.
- The ratings at follow-up can be made with or without a reminder of the ratings made at baseline, as both methods have advantages and disadvantages. In a research study the procedure should be consistent for all participants. The following protocol can be used in research studies where participants (and informants, where relevant) are reminded of the specific ratings they gave at baseline before asking them for their current ratings:

1. Remind the participant of **goal 1**.
2. Remind the participant of how he/she was functioning with regard to goal 1 at the time of the baseline assessment by reading the **description of current attainment** level for that goal from the baseline assessment.
3. Remind the participant of **the specific attainment rating** he/she gave at baseline for goal 1 and ask for a current attainment rating.
4. **If applicable**, remind **the informant** of the specific rating he/she gave at baseline for the participant's attainment for goal 1 and ask for a current attainment rating.

Repeat this procedure for each goal. If your study has multiple follow-ups at different time-points, participants should be reminded only of the ratings they gave at the baseline assessment, and not reminded of ratings made at any previous follow-up assessments.

Using the BGSi in a Randomised Controlled Trial

Additional consideration is needed when the BGSi is used in a randomised controlled trial, where typically the process of initial goal-setting and the subsequent intervention or therapy programme will be carried out by different people in order to avoid assessment bias:

- It may be more appropriate to incorporate the definition of goal attainment descriptors and their assessment at follow-up into the intervention protocol rather than including these in the follow-up assessment completed by the blinded researcher.
- Those analysing the results will not necessarily know all the background information gained about the participant during the assessment visits, so it is particularly important to ensure that goal statements are expressed with clarity and precision.
- Formulating goals based on the outcome the person wants to achieve to leave open the possibility that the goal can be achieved through various methods. This may be preferable in a research study, where the goals are elicited by an interviewer who is not involved in the subsequent intervention (e.g. single-blind randomised controlled trials).
- In intervention trials, goal-setting and evaluation of progress may be done by a researcher who is not involved in delivering the intervention, and in randomised single-blind trials the researcher would not know which participants had been allocated to the intervention condition. In this situation, during the trial, the person delivering the intervention (here referred to as the 'therapist') must not discuss the progress of any participants with the researcher. However, during the initial assessment, to ensure that the goals are suitable for use in the intervention, the researcher may seek advice from the therapist, and can provide the therapist with information about the goals that are being considered as a basis for discussion.
- The intervention timeframe may be particularly important in a research study, where the goal will typically be reassessed after a certain time-period which is the same for

all participants. Ensure the goal is achievable within the time available and consider how work on the goal may be spread across the relevant period of time. A goal undertaken and completed early on may not be recalled fully at the follow-up assessment, and a goal intended to be carried out at the end of the study timeframe may leave limited opportunity for progress. However, it is not that the participant has to work on the goal for the duration of the intervention, and it is usually unnecessary to specify the exact date for achieving the goal within the goal statement.

Difficulty identifying goals in an intervention trial

In an intervention trial, inability to identify goals may indicate that the intervention is potentially not needed or not suitable for that person. If goal attainment is the primary outcome, then inability to set goals means the participant's data cannot be included in the outcome analysis, so in these cases identifying at least one therapy goal would be a prerequisite for taking part in the study.

It is essential to carefully consider each situation where a potential participant may need to be excluded in relation to difficulties in identifying suitable goals. If a person appears to understand the idea behind goal-setting and the intervention (i.e. can give informed consent), and shows willingness to engage in the goal-setting process and potentially in the intervention (i.e. at least partially acknowledges that there is scope for improvement), you will want to include this person in the study and make every effort to identify suitable goals. It is crucial to ensure that only people who are genuinely not interested in identifying and working toward goals are excluded on the basis of not being able to identify suitable goals.

For monitoring and quality purposes, consider the following and record reasons for any exclusions resulting from inability to set goals:

- It is important to ensure that the person understands the concept of goal-setting and is willing to engage in discussion about potential goals. You need to explain very carefully the nature of your study and you may need to engage in some discussion about what a potential goal might be and what the goal-setting process involves. Deciding whether a person understands the concept of goal-setting and is willing to take part in the study and set goals may relate to this person's capacity to give informed consent, so extra care is needed to ensure that you explain the nature of the study or intervention in detail. This is particularly important when working with people with cognitive impairments.
- If a person states explicitly that he/she is happy with his/her daily life at the moment despite potential difficulties, does not wish to engage in discussion about making any changes or improvements to his/her current situation, and does not wish to set goals, then the intervention is probably not suitable for this person. One might expect that a person with these views would not express interest in an intervention study, but occasionally for various reasons (e.g. a keen relative, curiosity, seeking contact with people) you may come across such situations.

To have a full picture as to why exactly a person was excluded from the study you may want to indicate which of the following apply:

- The person does not acknowledge any difficulties
- The person thinks he/she does not need any additional support
- The person believes the particular intervention offered would not be helpful
- The person is not motivated to set goals and/or work on the goals
- The person is unable to identify possible areas to work on or specific goals despite general willingness to engage in the goal-setting process
- Discussing difficulties/potential goals causes too much distress for the person
- It is the family member or carer who advocates taking part the study
- The family member or carer does not want the person to take part in the study or work on possible goals (particularly where the family member or carer is required to take part in the study as well)

Allocation

For some participants, you may find that they have been waiting to have an opportunity to set goals as they are fully aware of the difficulties they experience and are highly motivated to work on attaining their goals.

Examples:

- A person might be aware that she can no longer remember the names of her friends at her local bowls group, or her grandchildren.
- Other participants might want to set themselves projects, such as joining a local social group or completing a DIY project.

In randomised controlled trials where only one group of participants receives support to achieve the identified goals, it is important that the interviewer reminds each participant that he/she may or may not receive support to achieve their goals. Therefore, it is important when setting goals with the participant that you do not give any suggestion that the participant will definitely receive support/help from a therapist to achieve these goals. Remind the participant of your study design and rationale for including a control group. This could help to reduce any disappointment for participants who are informed that they have not been randomised to receive the intervention.

Some participants who do not receive the intervention may decide to work towards attaining their goals by themselves, without the support of the research team, as the goal-setting process may have sparked motivation for them to make changes. This is an important factor for you to consider. It may be unethical and impractical to prevent participants in a treatment-as-usual control group who do not receive an intervention from making their own changes and working towards their goals.

Comments on the goal-setting process

The collaborative and person-centred nature of goal-setting makes the process a powerful tool for facilitating changes in behaviour and improving self-efficacy. A successful goal-setting process is dependent on the interviewer, interviewee, and family member or carer (if applicable). The attitudes and judgements that you and the interviewee bring to goal-setting can shape the process and outcome of the meeting. Therefore, it is important to provide a warm and reassuring atmosphere so that the person feels able to share his/her thoughts and experiences. Rapport-building is a vital precursor to eliciting meaningful goals. It is also important that the interviewer is inquisitive and engaged in the goal-setting process. Often, the interviewee will need your help to reflect on his/her experiences of daily life and to formulate relevant goals. Furthermore, you can facilitate positive communication with the interviewee and family member or carer, perhaps by introducing topics that have not previously been discussed. Although the goals can highlight difficulties that the person currently has, eliciting goals can be an enjoyable and inspiring process for all involved.

Example:

In a study with people with memory difficulties, during Step 1 of the BGSi, when asked about what difficulties he experiences during his daily tasks, the participant mentions that he has noticed some changes in his daily routine, feels that he is no longer able to do the simplest of tasks anymore and relies more and more on his wife. One example mentioned is that he no longer brings her breakfast in bed, and it is suggested that this would make a good goal. A superficial assessment of this suggestion might lead you to think that this is a goal that the wife wants to be addressed, with no benefit to the husband, and you might direct the conversation elsewhere to other difficulties voiced by the participant. However, by asking the participant to tell you more, you learn that he used to enjoy waking up early and preparing breakfast for himself and his wife. This is something he has done for over 50 years, and he now feels upset that he cannot carry out this nice gesture for his wife. The discussion about why he stopped making breakfast suggests that with the aid of some strategies it might be possible for him to continue making breakfast (e.g. to address his ability to multi-task or locate items in the kitchen). By listening carefully and facilitating discussion, you can gain insight into the meaning of a general complaint, and by applying the SMART principles, you can formulate a specific objective that is of importance to the participant.

The interviewer plays an important role in eliciting areas that need improvement and in directing the interviewee's attention and effort towards relevant activities and behaviours. For some individuals, talking to an interviewer who is interested in hearing about their experiences and feelings may be the first time they have had an opportunity or felt confident enough to express their concerns and discuss particular difficulties. Some people may not have previously reflected on their current situation in the context of what they find difficult

to do, how things could be improved, or what new skills they would like to learn. Discussion with the interviewer during the goal-setting process can help them gain more insight into their current situation. Therefore, the process of identifying personally-meaningful goals can be the first step towards significant improvements, and may be an interesting and rewarding experience for both interviewer and interviewee.

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Appendix 1. The Bangor Goal-Setting Interview version 2 (BGSi)

The Bangor Goal-Setting Interview

Research in Ageing and Cognitive Health, University of Exeter

Linda Clare, Sharon M Nelis and Aleksandra Kudlicka

Version 2 2016

Interviewee ID	Date of birth	Gender	Date of initial assessment
Interviewer			
Informant (where applicable – state nature of relationship)			
Planned dates of follow-up assessments:	Follow-up 1	Follow-up 2	Follow-up 3
Actual dates of follow-up assessments:	Follow-up 1	Follow-up 2	Follow-up 3
Dates of planned contacts (e.g. therapy or mentoring sessions) if applicable			

STRUCTURE OF THE INTERVIEW

Step 1: Identifying areas to address (initial assessment only)

Step 2: Setting SMART goals (initial assessment only)

Step 3: Rating attainment (step 3a, initial and follow-up assessments), and importance and readiness to change (step 3b, initial assessment), in relation to each goal

Step 4: Assigning goal attainment descriptors to current attainment level (follow-up assessment only)

Instructions for completion are provided at each step.

Prior to carrying out the interview, the interviewer should be familiar with the detailed instructions provided in the *Bangor Goal-Setting Interview Manual*.

STEP 1: IDENTIFYING AREAS TO ADDRESS

Select areas that are relevant to the current study or intervention, or the individual's needs (the form allows for up to five, but more can be added if needed). Examples might be physical activity, mental activity, diet, etc. Discuss each given area with the interviewee and identify issues that might form a basis for goals.

For each area for improvement, discuss with interviewee the importance of making changes and readiness to make changes in this area. This will allow you to establish which difficulties or areas for improvement are most relevant to the interviewee and therefore likely to develop into a suitable goal.

Area 1 (specify the area): _____

Area 2 (specify the area): _____

Area 3 (specify the area): _____

Area 4 (specify the area): _____

Area 5 (specify the area): _____

STEP 2: SETTING SMART GOALS

With the overview gained in Step 1 in mind, return to each of the selected areas (or those most relevant) and negotiate the specific SMART goals. SMART goals are Specific, Measurable, Achievable, Relevant/Reasonable, and Time-bound (achievable within a realistic time-frame). The form allows for up to 5 goals but additional goals can be added if required. State each goal in the first person in clear behavioural terms, describing full goal attainment ('I will...').

The interviewee should then be asked to describe current attainment in relation to the goal; the informant's description could also be sought where appropriate. Descriptors of 25%, 50%, and 75% goal attainment may be added; this can be discussed with the interviewee in terms of what will be different when, or how we will know when, he/she is a quarter of the way, half-way or three-quarters of the way to achieving the goal. Barriers and facilitators to achieving the goal can then be discussed with an emphasis on resources that will help in overcoming obstacles and achieving the goal.

Goal identification: Goal 1

Goal statement (100% goal attainment):

Description of current attainment (interviewee):

Description of current attainment (informant):

Goal attainment descriptors

25% attainment:

50% attainment:

75% attainment:

Barriers, facilitators and resources

- ❖ What do I need to do to reach this goal?
- ❖ What might get in the way of reaching this goal?
- ❖ What resources do I have to help me meet this goal?
- ❖ What will help me to overcome obstacles and achieve this goal?

Goal identification: Goal 2

Goal statement (100% goal attainment):

Description of current attainment (interviewee):

Description of current attainment (informant):

Goal attainment descriptors

25% attainment:

50% attainment:

75% attainment:

Barriers, facilitators and resources

- ❖ What do I need to do to reach this goal?

- ❖ What might get in the way of reaching this goal?

- ❖ What resources do I have to help me meet this goal?

- ❖ What will help to overcome obstacles and achieve this goal?

Goal identification: Goal 3

Goal statement (100% goal attainment):

Description of current attainment (interviewee):

Description of current attainment (informant):

Goal attainment descriptors

25% attainment:

50% attainment:

75% attainment:

Barriers, facilitators and resources

- ❖ What do I need to do to reach this goal?

- ❖ What might get in the way of reaching this goal?

- ❖ What resources do I have to help me meet this goal?

- ❖ What will help to overcome obstacles and achieve this goal?

Goal identification: Goal 4

Goal statement (100% goal attainment):

Description of current attainment (interviewee):

Description of current attainment (informant):

Goal attainment descriptors

25% attainment:

50% attainment:

75% attainment:

Barriers, facilitators and resources

- ❖ What do I need to do to reach this goal?

- ❖ What might get in the way of reaching this goal?

- ❖ What resources do I have to help me meet this goal?

- ❖ What will help to overcome obstacles and achieve this goal?

Goal identification: Goal 5

Goal statement (100% goal attainment):

Description of current attainment (interviewee):

Description of current attainment (informant):

Goal attainment descriptors

25% attainment:

50% attainment:

75% attainment:

Barriers, facilitators and resources

- ❖ What do I need to do to reach this goal?

- ❖ What might get in the way of reaching this goal?

- ❖ What resources do I have to help me meet this goal?

- ❖ What will help to overcome obstacles and achieve this goal?

STEP 3: RATING ATTAINMENT, READINESS TO CHANGE AND IMPORTANCE

Once the goals are identified, obtain rating of attainment (step 3a) and ratings of importance and readiness to change (step 3b), for each goal on a 1 – 10 scale. To help explain the scales and complete the ratings you can use a visual representation of the rating scales.

Where appropriate, a separate, independent rating of attainment can be provided by (a) the assessor, where the assessor is in the role of therapist helping the interviewee to work towards the selected goals, and/or (b) a family carer or other suitable informant.

The form allows for the following ratings to be completed, but these can be amended or additional added, as required.

Step 3a:

- I. Interviewee Ratings of **Attainment** (baseline and follow-ups)
- II. Informant Ratings of **Attainment** (baseline and follow-ups)
- III. Therapist/assessor ratings of **Attainment** (baseline and follow-ups)

Step 3b:

- IV. Interviewee Ratings of **Readiness to change** (baseline only; optional)
- V. Interviewee Ratings of **Importance of achieving the goal** (baseline only; optional)

Attainment: a rating of the interviewee's current attainment in relation to the identified goal
1 = cannot do or am not doing successfully; 10 = can do and am doing very successfully

Readiness to change: the interviewee's perception of his/her readiness to make a change in order to achieve the goal
1 = not ready to work on the goal; 10 = extremely ready to work on the goal

Importance: the interviewee's perception of the importance of the goal
1 = not important at all; 10 = extremely important

Attainment ratings are repeated at the follow-up assessment(s) to determine what changes have occurred. The form allows for three follow-up assessments, but additional follow-ups can be added where needed.

I. Interviewee Ratings of Attainment				
Goals	Attainment Initial	Attainment Follow-up 1	Attainment Follow-up 2	Attainment Follow-up 3
1.				
2.				
3.				
4.				
5.				
Interviewee mean attainment scores				
Mean attainment score = $\frac{\text{Sum of attainment scores}}{\text{Number of goals set}}$				
Initial	Follow-up 1	Follow-up 2	Follow-up 3	
_____ =	_____ =	_____ =	_____ =	
Interviewee change in attainment scores				
Change score = (Mean attainment score at follow up) – (Mean attainment score at initial assessment)				
	(Follow-up 1) – (Initial)	(Follow-up 2) – (Initial)	(Follow-up 3) – (Initial)	
Change scores:				

II. Informant Ratings of Attainment				
Goals	Attainment Initial	Attainment Follow-up 1	Attainment Follow-up 2	Attainment Follow-up 3
1.				
2.				
3.				
4.				
5.				
Informant mean attainment scores				
Mean attainment score = $\frac{\text{Sum of attainment scores}}{\text{Number of goals set}}$				
Initial	Follow-up 1	Follow-up 2	Follow-up 3	
_____ =	_____ =	_____ =	_____ =	
Informant change in attainment scores				
Change score = (Mean attainment score at follow up) – (Mean attainment score at initial assessment)				
	(Follow-up 1) – (Initial)	(Follow-up 2) – (Initial)	(Follow-up 3) – (Initial)	
Change scores:				

III. Therapist/assessor ratings of Attainment				
Goals	Attainment Initial	Attainment Follow-up 1	Attainment Follow-up 2	Attainment Follow-up 3
1.				
2.				
3.				
4.				
5.				
Therapist/assessor mean attainment scores				
$\text{Mean attainment score} = \frac{\text{Sum of attainment scores}}{\text{Number of goals set}}$				
Initial	Follow-up 1	Follow-up 2	Follow-up 3	
_____ =	_____ =	_____ =	_____ =	
Therapist/assessor change in attainment scores				
$\text{Change score} = (\text{Mean attainment score at follow up}) - (\text{Mean attainment score at initial assessment})$				
	(Follow-up 1) – (Initial)	(Follow-up 2) – (Initial)	(Follow-up 3) – (Initial)	
Change scores:				

IV. Interviewee Ratings of Readiness to Change - optional	
Goals	Readiness to change rating
1.	
2.	
3.	
4.	
5.	

V. Interviewee Ratings of Importance - optional	
Goals	Importance rating
1.	
2.	
3.	
4.	
5.	

STEP 4: ASSIGNING GOAL ATTAINMENT DESCRIPTORS

At follow-up, ask the interviewee to describe current attainment in relation to each goal. Where available, also take into account the informant's descriptions and the therapist/assessor observations.

For each goal, match this information to the goal attainment indicators and goal statement to identify the extent of goal attainment (0%, 25%, 50%, 75% or 100%).

FOLLOW-UP 1				
Goal	Interviewee description of current attainment	Informant description of current attainment	Assessor description of current attainment	Assessor rating of extent of goal attainment
1				
2				
3				
4				
5				

FOLLOW-UP 2

Goal	Interviewee description of current attainment	Informant description of current attainment	Assessor description of current attainment	Assessor rating of extent of goal attainment
1				
2				
3				
4				
5				

FOLLOW-UP 3

Goal	Interviewee description of current attainment	Informant description of current attainment	Assessor description of current attainment	Assessor rating of extent of goal attainment
1				
2				
3				
4				
5				

Appendix 2. Visual representation of the attainment rating scale - Step 3a



1

2

3

4

5

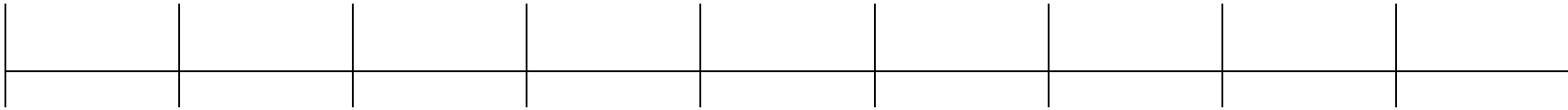
6

7

8

9

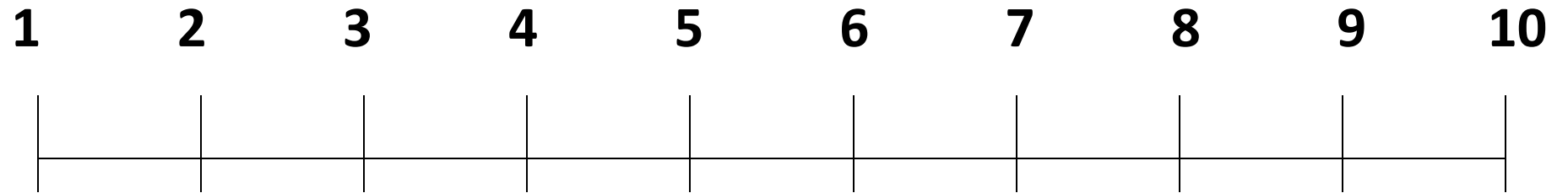
10



**Cannot do or am
not doing successfully**

**Can do and am doing
very successfully**

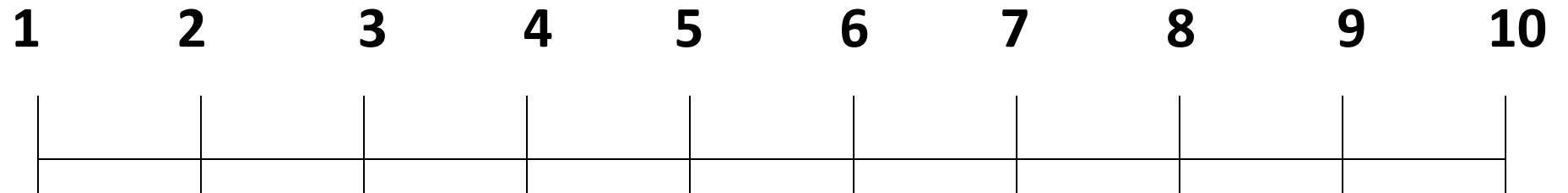
Appendix 3. Visual representation of the importance rating scale - Step 3b



**Not at all
important**

**Extremely
important**

Appendix 4. Visual representation of the readiness to change rating scale - Step 3b



**Not at all ready
to work on the goal**

**Extremely ready
to work on the goal**

Appendix 5. An example of a handout for interviewees to facilitate goal identification in older people living with dementia

Things you would like to do

Memory difficulties can impact on daily life in various ways. There are different things that people may want to change to make their lives more enjoyable.

We ask everyone taking part in the study to come up with several goals that they would like to achieve. A goal might be something that you currently find difficult to do and wish you could do more easily, or without getting frustrated. Or a goal might be something that you are currently not doing and would like to do more of. Or it might be something that you would like to learn how to do.

Here are some goals that other people have found personally important and wanted to achieve:

- ❖ I would like to go to the shop on my own to buy milk and bread.
- ❖ I would like to know the date without asking my husband.
- ❖ I would like to know the time of appointments or events that are happening on a particular day.
- ❖ I would like to organise my loose photographs into albums.
- ❖ I would like to learn how to use a mobile phone to phone my wife when we are out if we become separated.
- ❖ I would like to talk more confidently with my friends and family.

The questions overleaf may help you to think about what you would like to change.

Think about your day-to-day routine

- What do you find difficult to do around the house because of memory problems?



- What would you like to start doing, or learn how to do, in your day-to-day life?

Think about the activities you enjoy

- How do memory problems impact on your enjoyment of doing your activities?



- What activities would you like to do more of, or start doing?

Think about your friends and family

- How do memory problems impact on your ability to talk to friends and family members?



- What changes would you like to make so that you can enjoy communicating with people more?
