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The role of self-efficacy, locus of control, and intellectual ability in guided self-help for depression, anxiety and stress

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Contents

Abstract

Objectives. To see whether a cognitive behavioural guided self-help approach can reduce mental health symptoms, which patients might benefit most, and whether such a treatment increases self-efficacy and internal locus of control.

Design. Repeated measures and correlational designs were used.

Methods. 173 patients were recruited at a cognitive behavioural guided self-help clinic in Edinburgh, of which 97 completed the three-session intervention. Verbal IQ was estimated with the National Adult Reading Test (NART). Measures of emotional symptoms, self-efficacy and locus of control were taken before and after treatment, with follow-up at one month and six months.

Results. Patients completing the intervention made favourable gains, which were maintained at six months. Self-efficacy and locus of control measures were not robustly correlated with mental health improvement, but did show pre- to post-treatment changes in themselves.

Conclusions. Guided self-help appears to be a useful treatment option for those with depression, anxiety and stress. The implications of the findings, the strengths and limitations of the study, and areas for future research are discussed.

Introduction

In order to locate articles about self-help for mental health problems, an online search of *psycINFO* was performed, using the search terms ('self-help' or 'bibliotherapy') and ('mental health' or 'depression' or 'anxiety').

What is self-help?

There is little consensus as to how to define self-help (Richards, 2004). Broader conceptualisations describe self-help as a general philosophy, which emphasises the responsibility and efficacy of the individual for their own health and wellbeing. Others might define self-help in terms of health professional involvement (or rather, the lack of it) stating that self-help comprises any clinical intervention in which such professionals are only minimally involved, if at all. Other authors have been more specific, outlining certain aspects of *content* they feel are integral to a proper 'self-help' intervention. These criteria can be applied across a number of different technologies through which self-help might be delivered.

With regard to a *philosophy* of self-help, Richards (2004) asks whether this might incorporate general notions of 'self-efficacy, user-empowerment and the end to professional dominance of our mental health' (p.117). He sees health-related self-help as just one example of the ways in which society places an increasing emphasis on self-development, fostering a 'can-do' attitude, and trying one's hand at tasks hitherto considered to be within the domain of experts.

Charles *et al.* (1999) see certain societal trends as extremely relevant to healthcare. Firstly, they argue that, with the increased influence of consumerism, the public have become more discerning with regard to the services they receive. Charles *et al*. (1999) also see the women's movement as being partly responsible for developing the climate in which one can challenge medical authority as it pertains to their own care. Health-related legislation has increasingly highlighted the rights of patients, with the result that patients feel more at liberty to air their views (and grievances) to health professionals. Also, the view that healthcare is an exact science is gradually being replaced by the

notion of the imperfect art, a shift that could be partly attributable to media presentations of (often alarming) variations in the quality of healthcare across individual patients, services and geographical areas.

In 2001, the Department of Health issued a white paper entitled *The Expert Patient: a New Approach to Chronic Disease Management for the 21st Century* (Department of Health, 2001a). With advances in acute medicine and increased longevity in the population, this document highlights the way in which chronic disease is becoming the most significant health burden for society. In order to manage this burden, it is argued that patients should be active agents (rather than passive recipients) of care. It is the responsibility of healthcare professionals to develop the knowledge of patients in order that they are in a position to be key decision makers who share in the responsibility for their own health. While symptom reduction will always be an important goal in healthcare, the expert patient approach also advocates increased sense of patient control, confidence and self-efficacy.

Self-help is an increasingly widespread philosophy in healthcare. However, more specific definitions of self-help have been suggested, which incorporate the level of professional involvement in a health-related intervention (Newman, 2003). While it is self-evident that an important goal of self-help is to allow a person to help themselves (Cuijpers, 1997), most definitions of self-help do not preclude the limited involvement of professionals (Lewis *et al.*, 2003). Indeed, the common use of the term 'intervention' to describe self-help approaches might imply the activity of some outside agent. Cuijpers (1997) describes bibliotherapy (a specific type of self-help) as a 'standardised treatment method in which [the patient] can help himself without major help from the therapist' (p.139), but also points out some specific roles which the therapist might be expected to fulfil in such a programme (e.g. accurate diagnosis, selection of materials). Although professionals can facilitate self-help interventions, the emphasis remains on self-management. Through self-help, individuals should have the opportunity to acquire and develop skills required to take a more active role in the management of their difficulties in the future (Williams, 2003a; Williams & Whitfield, 2001) in order that benefits might continue beyond the end of the treatment (Frude, 2004a).

The extent to which professional involvement in self-help makes it more effective is a matter of debate (e.g. Scogin *et al*., 1990), and there is currently little consensus as to a potential optimum level of professional facilitation. Some of these issues will be examined shortly, alongside a review of the evidence for self-help efficacy.

Some authors have suggested that a definition of self-help should incorporate certain elements that they would consider essential to an approach of this type. The first important aspect of self-help is *education*. Self-help should increase a person's knowledge about a particular problem by providing information relevant to that person as well as any friends and family members wishing to support them (Williams, 2003a). This is consistent with the trend across all types of healthcare delivery, where patients are increasingly being encouraged to be well-informed about matters concerning their health and treatment in order that they can better participate in their recovery (Department of Health, 2001a). Self-help materials are one way in which such knowledge can be developed.

It is commonly argued that materials that *only* seek to educate do *not* constitute self-help. Lewis *et al*. (2003) state the importance of independent coping skills, and that self-help materials should contain *explicit instructions* as to how these might be acquired and developed with a view to managing particular difficulties more effectively. These instructions should be detailed enough that a person using the materials can implement new coping strategies on their own (Cuijpers, 1997). Overall, good self-help materials should facilitate better self-management of problems (Williams & Whitfield, 1991).

The definitions of self-help outlined above are not restricted to a particular format of self-help (Williams, 2003a). If self-help materials are taken to involve the conveying of knowledge about a certain problem, as well as instructions for developing relevant self-management skills, it is clear that a wide range of media types are potentially suitable for this task. Marrs (1995) recognises the wide range of media through which self-help programmes can be delivered, including printed materials, computer programmes, audio recordings and video presentations. More recently, the internet has emerged as a viable conduit for self-help resources (Charles, 2006; Prasad & Owens, 2001).

Although they do not fall within the scope of the present study, mention should be given to self-help *groups* as an important and widespread mechanism for people with similar problems to educate and facilitate coping skills in one another. Self-help groups are usually run by non-professional volunteers, or entirely by a membership of like-minded individuals with similar difficulties. Such groups are an important manifestation of a society-wide self-help movement, and often arise as a result of a perceived inability of existing local services to meet the needs of group members (den Boer *et al*., 2004).

Relevance of self-help to mental healthcare

Over the past 20 years or so, self-help materials have emerged which are explicitly intended as treatments for mental health problems (Richards, 2004). Self-help, as a medium of mental healthcare delivery, should be of interest to services aiming to address the needs of those with mental health problems. They may offer one way of delivering evidence-based treatments to a large number of people.

Mental health problems are extremely widespread. It is very difficult to gauge their prevalence precisely, since many people experiencing this type of problem do not present themselves to services (Frude, 2004a). Also, estimates based on GP attendance or demand for psychotropic medication have the potential for bias (Layard, 2005). Figures based on UK surveys suggest that, at any one time, one in six people in the UK will be experiencing a specific mental health problem (National Office of Statistics, 2001). In Scotland, it is estimated that one in four people will experience mental illness at some point during the course of their lives (Scottish Public Mental Health Alliance, 2002).

There is an ever-increasing body of evidence to support the use of psychological interventions for a wide range of mental health problems (e.g. Butler *et al*., 2006; Roth & Fonagy, 1996). These research efforts are now recognised within government-endorsed treatment guidelines which strongly advocate psychological treatments as an important component of the care received by those experiencing mental illness (e.g. Scottish Intercollegiate Guideline Network, 2005; National Institute for Clinical Excellence, 2004; Department of Health, 2001b).

However, the success of psychological therapies has raised important issues regarding the allocation of resources to their delivery. As a result of their increased acceptance, there are also increased demands on services to provide these treatments. Because they traditionally require a relatively large amount of face-to-face contact with a practitioner, lengthy waiting lists become inevitable. Layard (2005) suggests that the relative inaccessibility of proven treatments is one of the reasons there is a disproportionate amount of public discontentment towards mental health services. He is keen that psychological therapies become more available to those who need them, and even to those *without* mental health problems who are nonetheless considered 'at risk'. It is clear that this vision will be unobtainable within the constraints of current service-delivery models. Self-help might represent one way of making psychological treatment principles available *en masse*.

Pros and cons of a self-help approach

Self-help approaches have different characteristics from conventional treatments, some of which might be considered desirable. Self-help is potentially much cheaper for services than therapist-directed treatment, since they do not require as much face-to-face contact with professionals. They also involve relatively little (if any) cost to patients, and can be accessed outwith tradtional healthcare settings if need be. In general, self-help approaches might be more empowering and less stigmatising of patients.

The relatively low cost of most self-help approaches, compared with most traditional face-to-face therapies, is a persuasive factor in their favour (Richards, 2004; Williams & Whitfield, 2001). Self-help materials can be bought as a book, video or CD-ROM at a fraction of the cost of a course of privately-obtained therapy. Frude (2004a) suggests that the reason that self-help approaches are yet to enjoy the high profile they deserve is precisely because their low cost limits their profitability for those marketing them, and contrasts this situation with pharmaceutical approaches which are subject to much greater investment in research and marketing initiatives. While most studies of self-help do not incorporate economic factors (Bower *et al*., 2001), some have attempted to explore this issue. Andersson *et al*. (2005) cite examples of existing internet-based

self-help treatments for panic disorder which, although free to access, involve significant costs to set up and maintain, and they conclude that more careful economic analyses are warranted. Gega *et al*. (2004) attempted to calculate a rough 'cost-per-head' of a computer-based cognitive behaviour therapy (CCBT) clinic, taking into account practitioner and administrator time, overheads, and licensing fees. They also arrived at an equivalent figure for 'normal' cognitive behaviour therapy (CBT), although some factors in this calculation, e.g. the proposed number and length of sessions, were unstated. They suggested that CCBT was 15% less expensive for each of 350 patients, compared to 'normal' CBT, and that this margin would increase with the volume of patients. However, like Andersson *et al*. (2005) the authors recognise the need for more rigorous analysis of financial factors when deciding whether or not to deliver self-help treatments.

A further advantage of self-help is that it can lead to a reduction in clinician demands. This reduction might be brought about in three ways. Firstly, less face-to-face clinician time is needed to carry out an intervention based on a self-help approach. Kenwright *et al*. (2004) studied the effects of a CCBT self-help course made available to a small sample of patients with panic or phobia. They found that those who used the *FearFighter* programme at home used it an average of sixteen times over a period of 66 days. The average amount of therapist contact involved was 113 minutes, most of which took place by phone. CCBT has also been made available through dedicated West London clinics. Marks *et al*. (2003) offered self-referred patients access to one of four computer packages, some of which were accessed on site at the clinic, whilst others were taken home. During the course of a year, one whole-time equivalent clinician dealt with 355 referrals (compared to the 50 or so that a more traditional CBT therapist might see). Each person who worked through a treatment was given, in total, around 90 minutes of therapist support over a 12 week period. The average patient experienced improvement in mental health symptoms that was both statistically reliable and clinically meaningful, although it is not known whether these improvements were maintained in the longer term.

Secondly, it has been argued that the use of self-help as an interim treatment for patients awaiting face-to-face therapy can render this subsequent treatment more effective, or even unnecessary (Frude, 2004a). White (1995) has demonstrated this in the case of his *Stresspac* self-help package. Patients with anxiety, who were referred to a primary care clinical psychology service, were randomly allocated to one of three groups. One group was given *Stresspac*, another was given verbal advice only, and another received no intervention. All groups were offered CBT three months after referral. It was found that *Stresspac* patients required 3.76 appointments on average, compared to 6.00 and 5.44 for patients in the verbal advice and no intervention groups respectively. However, it was not clear that the CBT therapist was blind to pre-therapy treatment condition. Since the therapist was in a position to dictate the length of therapy, it is possible that knowledge of experimental groupings might have influenced their decisions. The suggestion that prior self-help can reduce the need for face-to-face contact in subsequent therapy is nonetheless interesting and warrants further investigation.

The third way in which self-help might reduce demands on clinicians is through the improvement of patient symptoms such that they present less often to services in the future. In his follow-up study, White (1998) sent questionnaires to patients three years after they completed the above course of CBT. None of the 18 respondents in the *Stresspac* group had obtained further treatment in secondary care over the intervening three years, compared to five out of 30 (12%) in the 'advice only' and 'no intervention' groups. Also, a smaller proportion of *Stresspac* patients (3; 17%) had visited their GP regarding their anxiety problems compared to those in the other two treatment conditions (16; 53%). While the follow-up data set is too small to justify firm conclusions, the noted trends suggest that self-help might ease the burden on clinicians over the long term as well.

With increasing waiting lists for face-to-face therapies, the relative *accessibility* of self-help treatments makes them an attractive alternative (Frude, 2004a). Approaches which are entirely unsupervised are as accessible as the nearest bookshop. Even interventions with a degree of therapist support can usually be offered in a timely

manner, since they require fewer service resources and patients do not remain on therapist caseloads for a long time (as can sometimes be the case with more traditional models of therapy). Self-help is also a possible option for those who are working (Williams & Whitfield, 2001) or who for any reason are unable to commit to attending a clinic on a regular basis (Kenwright & Marks, 2004).

While a self-help might represent a way of increasing the accessibility of effective treatment, it has been noted that a lot of guided self-help programmes are offered by specialist mental health services, and as such require that patients pass through the primary care 'filter' (Bower *et al*., 2001). A significant proportion of those experiencing difficulties will not present to their GP, and far fewer will be passed through to secondary care services (Goldberg & Huxley, 1980). As a result, there have been recent efforts to improve the accessibility of self-help by initiating programmes in primary care and the community (e.g. Reeves & Stace, 2005; Holdsworth *et al*., 1996; Donnan *et al.*, 1990).

There are a number of other theoretical reasons that self-help approaches might be preferable to patients over therapist-led models of treatment. Firstly, self-help carries with it the notion that users have the ability to help themselves, and as such empowers patients (Richards, 2004) and discourages helplessness (Rogers *et al*., 2002). There is also the possibility that patients feel more comfortable treating themselves without having to disclose sensitive information to another person, thus avoiding a sense of stigmatisation that can sometimes accompany mental health problems (Gega *et al*., 2004).

While much has been said of the advantages of self-help over professional-involved therapeutic models, a number of authors have also highlighted the need for caution when advocating this approach. Firstly, it is possible for the relative lack of human contact to be seen as a *negative* aspect of self-help. Patients referred for help with emotional difficulties often expect to be allocated 'someone to talk to' and report finding this the most useful part of a guided self-help programme (Rogers *et al*., 2002). When these expectations are not met, there is a possibility for patients to feel 'fobbed off' with a treatment which involves less face-to-face contact than they were hoping for.

Evaluations of self-help interventions often suffer from low uptake (Whitfield *et al*., 2001) and high drop-out rates (Rosen, 1987), with one of the cited reasons being that patients might be 'holding out' for a face-to-face treatment (Marks *et al*., 2003).

As well as the possibility that patients might see more value in more heavily supported treatments than self-help, other potential drawbacks of unsupervised approaches have been raised. Rosen (1987) points out that self-help books rarely (if ever) provide the means to make accurate diagnoses, with the consequence that the techniques they describe might be unsuitable for the problem being experienced. It is also difficult to monitor compliance with self-help, and to assess outcome. Self-help approaches might also be seen as 'one size fits all' approaches which lack the individual specificity necessary to suit each client (Keeley *et al*., 2002). Rosen (1987) points out the possibility that techniques might be poorly understood and incorrectly applied, resulting in a poor response that could be attributed to personal incompetence on the part of the patient. This could, in turn, lead to frustration towards the self and negative expectations for future treatment.

Popularity of self-help

Having explored some of the potential advantages of self-help as a modality for delivering mental healthcare, it would be interesting to know how widely self-methods are being used. Sadly, few data exist regarding the prevalence of self-help use in the community, as many users do not come to the attention of mental health services (Frude, 2004a). However, in addition to a survey specifically about self-help use (Najaviks & Wolk, 1994), some researchers have tried to get an idea of how popular, acceptable and satisfactory self-help approaches are to the public. It has also been shown that self-help approaches are commonly advocated by mental health professionals for the patients under their care (e.g. Starker, 1988).

Najaviks & Wolk (1994) conducted a survey in the US about self-help use. In a random community sample, they found that 25 out of 76 respondents had used some form of self-help material in the past year. Most of the respondents reported accessing this material for the purpose of entertainment or to gain factual information. The scope

of material that constituted self-help was much broader than the definitions usually found in the self-help literature (e.g. Cuijpers, 1997) as they included things like television programmes and radio phone-ins. Unfortunately, it is difficult to eliminate the possibility that the reported reasons for accessing self-help were biased by social desirability effects, with patients offering reasons that did not reflect personal problems. In addition, it is not clear whether a similar proportion of the UK population would report using self-help.

As a rough index of the popularity of self-help, some researchers have studied the 'hit-rate' of terms like 'self-help' in internet search engines and shopping sites. Williams (2003b) found that an online Google search for the terms 'self + help + anxiety' yielded 926,000 sites, and that a search for self-help in general returned around 5 million sites. Frude (2004b) states that there are over 28,000 titles identified under a search for 'self-help' on the Amazon UK website. These figures give a sense of the widespread popularity of self-help being consumed *independently* of mental health services.

In an Australian survey, Jorm *et al*. (1997) sought to ascertain the perceptions of medical and psychiatric professionals, as well as a large sample (N = 2031) of the general public, about a range of possible interventions for mental health problems. Respondents were confronted with two brief vignettes, one about a patient with depression and another about a patient with schizophrenia. With regard to the depression vignette, the public sample rated 'reading self-help books' as more appropriate than medication, or seeing a psychiatrist or clinical psychologist. The only options that were rated as superior to written self-help materials were visiting a GP or counsellor, seeking social support from friends and family, taking vitamin supplements or herbal remedies, learning to relax, getting out more, and being more physically active. This pattern was not reflected in the opinions of GPs, psychiatrists and clinical psychologists, who all rated the direct involvement of *any* of these professions higher than the self-help option. This study suggests that professional opinions can be at odds with the views of the public, who appear to favour self-help over involvement with health services.

Evaluations of self-help often incorporate some measure of patient satisfaction. With respect to a CCBT clinic (Marks *et al*., 2003), patients gave a 'good' rating to the

clinic as a whole, although were slightly more satisfied with the therapist support than the truly 'self-help' aspects, mirroring the findings of Rogers *et al*., (2002). When written materials are given to patients, the vast majority appear to like them, and would recommend them to friends in a similar position (Holdsworth *et al*., 1996; White, 1998).

Use of self-help by therapists is a fairly common practice. In a small survey of US therapists, Starker (1988) found widespread use and approval of self-help materials as an adjunct to therapy. Although 95% of therapists prescribed written materials at least occasionally, the author suggests that this represents a tiny proportion of the self-help consumed by the public at large. He also warns that recommending a particular book might be interpreted as a professional endorsement of the material, and that this may or may not be warranted. In a Canadian survey, Adams and Pitre (2000) found that around 68% of therapists and counsellors used written self-help materials as an adjunct to therapy, most often to encourage patients to take responsibility for helping themselves. Like Starker (1988), the authors found that therapists were often recommending books that had received no empirical validation, and point out that it is the responsibility of ethical therapists to consider their choice of recommendation carefully. In the UK, 89% of surveyed members of the British Association for Behavioural and Cognitive Psychotherapies (BABCP) had recommended written materials to their clients, the vast majority based on CBT principles and used as an adjunct (rather than an alternative) to therapy (Keeley *et al*., 2002). Although prescribers of self-help rated its usefulness highly, they did not rate such materials as more useful than face-to-face contact with a therapist. Also, as previously found in the Canadian and US surveys, items of self-help were routinely given without any prior evaluation of their effectiveness.

Floyd (2001) summarises many of the reasons therapists might opt to supplement their treatments with self-help, as well as providing some notes of caution. Self-help can facilitate socialisation into a particular therapeutic model (e.g. CBT), which in turn can accelerate subsequent treatment. Self-help materials can also provide an efficient means of exposing a patient repeatedly to the principles of therapy, to encourage retention of ideas without the need to repeat material within sessions. Also, a shift of emphasis towards self-help techniques can increase a patient's self-efficacy and sense of

responsibility for their own treatment. Despite these advantages, he argues, care must be taken that a client does not feel 'fobbed off' with a book, nor that they feel threatened by any perceived evaluation of their intellectual prowess.

Graham *et al*. (2001) make the important point that self-help materials are often accessed by patients in therapy, without their therapists' knowledge. It is therefore important that therapists actively ask about self-help use, even if they do not choose to prescribe this themselves. Since it is more-or-less inevitable that these approaches will be accessed in any case by at least some patients, it is important that therapists make themselves familiar with self-help literature in order to be able to make appropriate recommendations (Scogin, 2003).

Content of self-help

The hesitations of some clinicians to embrace self-help materials wholeheartedly are often reported to be due to the fact that the available materials have not been validated empirically (e.g. Starker, 1988). It is argued that the content of self-help found in the public domain is more influenced by commercial rather than clinical concerns (Rosen, 1987). As discussed, therapists wishing to use self-help materials to supplement their individual clinical work are being encouraged to take responsibility for recommending materials that reflect evidence-based principles.

Rosen (1981) generated a set of criteria against which popular self-help books could be evaluated. He suggests that self-help books should be easily identifiable as 'do-it-yourself' treatments. Information about empirical support (or lack of it) for the treatment should be clearly presented in such a way that readers are likely to have realistic expectations regarding the outcome. Like many subsequent authors (e.g. Cuijpers, 1997), Rosen (1981) argues for the inclusion of a reliable system for self-diagnosis, in order that the written intervention 'fits' the problem being experienced. This method of diagnosis should not be haphazard, but rather should also be subject to critical evaluation. Books on similar topics should be compared with one another, and where possible, it is advocated that specific books will have undergone a test of efficacy

before they are recommended by therapists. At the very least, they should be based on principles for which efficacy has been established through careful research.

Few individual self-help titles have been evaluated, but another way in which self-help books might be made more acceptable to researchers is for them to be based on therapeutic techniques that have. Holdsworth *et al*. (1994) argue that self-help books must be based on an established model of psychological functioning; that is, they should convey both general principles as well as specific techniques which have *already* been shown to be effective for the problems they seek to treat.

Many therapeutic models have been transposed to popular self-help titles. These include Harris's (1969) *I'm OK, You're OK*, based on the principles of transactional analysis, and Kabat-Zinn's (2001) *Full Catastrophe Living*, based on the principles of mindfulness meditation. However, the most popular conceptual model for self-help, and the one which has been most rigorously evaluated, is CBT (Williams & Whitfield, 2001).

The widely adopted cognitive behavioural model stresses the relationship between cognitions, behaviours and emotional wellbeing (Beck *et al.*, 1979). The therapy which arose from this way of understanding human experience has been shown to be very effective. In a meta-analysis of 77 studies, patients with depression were found to obtain greater benefits from cognitive and behavioural approaches relative to other therapies, antidepressants, or no treatment at all, and were less likely to relapse (Gloaguen *et al*., 1998). A similar picture emerges for anxiety disorders: a meta-analysis of 35 studies showed that patients with Generalised Anxiety Disorder (GAD) given CBT improved comparably to those given appropriate medication, and were likely to maintain these gains for longer (Gould *et al*., 1997). CBT is now recognised as a useful intervention in a range of mental and physical disorders (Butler *et al*., 2006).

Williams (2003a) suggests that CBT is an *ideal* model to translate to self-help. Firstly, he points out that the educational aspects of CBT are very easily transferred to a written format. The model is clearly structured, which therefore lends itself to an approach that requires independent understanding on the part of the patient. The structure of CBT also allows self-help interventions to be organised in a modular

fashion. Finally, CBT homework involves the completion of specific tasks independently of the therapist, and it is argued that self-help is a logical extension of this.

Form of self-help

As well as the need for the *content* of self-help to be underpinned by substantiated psychological theory, the *form* in which this content is delivered is also important. In order that people can work through materials independently, they must be accessible, both in a physical and intellectual sense. They must also be appropriate for the problems to which they are applied. In addition, we have seen that the level of therapist involvement in self-help programmes can vary, and some researchers have talked about the possible merits of a greater or lesser therapist role.

As Bower *et al*. (2001) point out, the increased emphasis on self-help approaches within specialist mental health services fails to recognise those who are managed entirely in primary care. Since only a relatively small proportion of patients will pass the primary care filter (Goldberg & Huxley, 1980), they suggest that self-help materials should be made available as early as possible in the patient journey. However, it might be argued that those wishing to promote the use of self-help materials should go further, since a significant proportion of those experiencing a mental health problem will not even consult their general practitioner. More work is needed to increase the accessibility of useful self-help materials in community settings, such as in libraries or through public events.

Self-help materials should also be accessible in an intellectual sense. With regard to written literature, it has been suggested that a high degree of literacy is required in order for individuals to engage with a treatment of this kind (Frude, 2004a). Given that certain intellectual demands are made of people opting for a self-help approach, it is important that the materials they use are as readable as possible (Lewis *et al*., 2003). As part of the *Doing Well by People With Depression* project, the Scottish Executive recently compiled a list of self-help materials to recommend to patients, with readability being one of the key inclusion criteria (Scottish Executive, 2006). The readability of

self-help for mental health problems is all the more important as emotional distress can hamper concentration (Williams & Whitfield, 2001).

A number of systems exist for determining the readability of text. One popular system incorporates sentence length, word length and a measure of 'human interest' in an effort to quantify 'reading ease' (Flesch, 1948). On the rare occasions that self-help materials are subjected to this type of analysis, they can be found to exceed the reading ability of their target audience. O'Farrell and Keuthen (1983), for example, analysed 124 separate self-help books available in the US. They found that the median reading ability they required was greater than could be expected in around 35% of those who had completed less than 12 years in education. While this raises important implications, it is still the exception rather than the rule for authors to make explicit claims about the readability of their self-help materials. Once notable exception would be Williams (2003b), who has applied the Flesch (1948) Reading Ease formula to the individual workbooks in his self-help course for anxiety sufferers, in order to illustrate that they are suitable for those who are likely to use them. He maintains, however, that more work needs to be done to adapt self-help materials for children, those with learning disabilities, or those from non-English speaking backgrounds. Holdworth *et al*.(1994) also point out that comprehensibility of self-help text lies in more than a formally derived 'readability' score, and they suggest that the layout and overall presentation are equally important design considerations.

We saw earlier that the extent of therapist involvement can be considered important to a definition of a treatment as 'self-help' or otherwise. We also saw how therapists are increasingly using self-help materials to augment the therapeutic experience for their patients. The converse might also be true: there has been some debate as to whether the involvement of a therapist in traditionally 'self-help' approaches could also produce increased benefit.

There are a number of roles a health professional might usefully be expected to fulfil in a self-help treatment. Firstly, they can provide an accurate diagnosis in order that the correct treatment is applied (Cuijpers, 1997), since most self-help materials lack reliable methods for diagnosis (Rosen, 1987). Secondly, they allow patients to be

monitored, in order that progress can be measured and potential difficulties and risks managed (Rosen, 1987; Lewis *et al*., 2003). Reporting back to a therapist can also facilitate motivation to persist with self-help tasks, which is particularly important for those whose motivation is compromised as a result of their emotional difficulties (Lewis *et al*., 2003). Totally unsupervised treatments tend only to work for those who are highly motivated (Newman *et al*., 2003) and can be associated with dropout rates of up to 50% (Rosen, 1987).

In traditional face-to-face therapy, regardless of the specific approach used, it is consistently found that the quality of the therapeutic alliance is moderately predictive of outcome (Martin *et al*., 2000). This suggests that a positive working relationship with a helping professional, regardless of the specific techniques used, can facilitate recovery. It might be argued that the involvement of a therapist (even if minimally) allows the establishment of a beneficial therapeutic alliance which can aid progress in treatment.

The involvement of a professional in self-help is not without potential drawbacks. Rogers *et al*. (2002) found that patients in 'facilitated' self-help programmes sometimes saw the facilitator as a traditional therapist, a notion which might obstruct their own sense of responsibility for their own improvement. Patients in this study often cited the most positive aspect of the 'self-help' treatment as having someone to talk to, a finding which seems to somewhat undermine the notion of self-help. The authors suggest that significant emphasis should be placed on educating patients and referrers about the self-help approach in order that expectations of those entering such a programme are appropriate.

Evaluations of guided self-help programmes have often incorporated ratings of patient satisfaction, and these can give an interesting insight into the way in which 'facilitated' and 'self-help' aspects are perceived respectively. Marks *et al*. (2003) found that patient satisfaction ratings slightly favoured therapist contact over working on a computer, whilst Baer & Greist (1997) found that a third of patients using a computer programme as a self-help approach to OCD would have preferred a more traditional face-to-face approach. It appears that, for some, human therapeutic contact is more

valuable than self-help methods, while for others, therapist involvement might distract from the truly self-help components of a programme (Gould & Clum, 1993).

Efficacy of self-help

In general, evidence for the efficacy of self-help is compelling, but its profile has remained low due to its relative unprofitability compared to, say, medication (Frude, 2004a). A number of studies are outlined below which lend weight to self-help as an effective approach for a range of problems, across a number of different modes of delivery.

Five recent meta-analyses shed some light on the efficacy of self-help interventions. Scogin *et al*. (1990) assembled 40 studies on self-help, and categorised them according to level of therapist involvement in the self-help treatment, as well as target problem (habit reversal, anxiety/depression, phobia, skills training or 'other'). They found that self-help interventions were significantly more effective than no treatment, and were comparable to individual therapy in most cases. They did not identify any inferiority of interventions that were entirely self-directed over those that involved a degree of therapist involvement. Scogin *et al*. (1990) caution against the conclusion that self-help interventions, as a whole, are as effective as therapy. Most of the studies under analysis involved fairly specific problems which lent themselves to a psychoeducational approach, but were more circumscribed than much of what would be encountered in a 'real life' clinical setting. Also, the 'traditional therapy' conditions often involved a therapist going through the same self-help material in a group setting, which is probably different from most people's conception of 'therapy'. They also noted that most of the self-help materials used were devised specifically for respective studies, and were not available commercially. Finally, they draw attention to inevitable publication bias that can inflate the effect size of a treatment under meta-analysis.

Gould and Clum (1993) also performed a meta-analysis of 40 studies, and found an effect size of 0.76 for self-help relative to control conditions for depression, anxiety, and social skills training, regardless of format. They also pooled follow-up data and concluded that gains obtained through self-help are maintained. Like Scogin *et al*.

(1990), Gould and Clum (1993) found that therapist assisted approaches (whether self-help or therapy) were no more favourable, but concede that patient groups in these studies might not resemble clinical populations, as the majority had actively responded to advertisements.

Marrs (1995) is more conservative in his meta-analysis, and cites a slightly lower post-treatment effect size of self-help (0.57). He used a larger sample of studies (76) and chose to include unpublished data. While this might cast doubt on the quality of some of the studies, it goes some way to countering publication bias. He found that certain conditions (e.g. anxiety, sexual dysfunction, depression) were more amenable to change than others (e.g. weight loss, study problems, smoking). In addition, he found that self-help effect sizes identified in 'no treatment' controlled studies were higher than those observed for placebo-controlled studies. In other words, the benefits of self-help appeared greater in comparison to no treatment at all than when compared to placebo, suggesting that a proportion of the benefits obtained from self-help might be due to expectancy effects. Like Scogin *et al*. (1990), Marrs (1995) points out how few of the self-help titles in these studies are among those popularly recommended by mental health professionals (e.g. Starker, 1988), and calls for more research into the efficacy of specific materials. Again, no difference was found between therapist-directed and self-administered treatments, although the studies rarely focussed on complex clinical problems of the type that might be addressed in individual therapy.

A more recent meta-analysis by Cuijpers (1997) is much narrower in focus, concentrating on bibliotherapy for depression in particular. With only controlled studies eligible for inclusion, the sample of studies was inevitably small (6). A mean effect size of 0.82 was found, and there appeared to be no difference between the benefits conferred by self-help from those obtained through conventional therapy.

Den Boer *et al*. (2004) draw attention to a number potential biases in the above studies. Many studies included in these meta-analyses were uncontrolled, whilst a high proportion relied on recruitment through advertisement, or from student populations. It is possible, therefore, that they may be based on samples which do not reflect the characteristics of clinical populations. Consistent with this notion, den Boer et al. (2004)

point out that many of the studies in the foregoing meta-analyses are based on self-help approaches to specific, circumscribed difficulties, which are unlikely to impact on an individual's general functioning a great deal. They address these considerations in their own meta-analyses, in which only randomised controlled trials of self-help for emotional problems in clinical samples were included. On the basis of 13 trials (eight of which had not been included in any previous meta-analysis) den Boer *et al*. (2004) identified an effect size of 0.84 for bibliotherapy relative to waiting list or placebo treatment, a figure similar to that which has been identified for face-to-face cognitive therapy for depression (ES = 0.82; Gloaguen *et al*., 1998). Importantly, they also generated a 'failsafe *n*' in order to counter the possibility of publication bias, and estimated that more than 50 non-significant studies would need to be included in the meta-analysis in order to reveal bibliotherapy as ineffective.

Despite the overall findings of the above meta-analyses, it is worth drawing attention to a handful of studies in which self-help approaches were not found to be any more helpful than no treatment. Mead *et al*. (2005) allocated 144 patients awaiting psychological therapy to either guided self-help or to continue waiting for treatment. Patients allocated to the guided self-help option were given a self-help manual (devised specifically for this study) as well as a limited number of brief, one-to-one sessions with an assistant psychologist. A maximum of four sessions were given, each between 15 and 30 minutes. After three months, the two groups were indistinguishable on the basis of Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) and Beck Depression Inventory (BDI; Beck & Steer, 1987) scores. The authors concede that these findings are at odds with the current literature, and venture a number of (albeit speculative) explanations for them. Firstly, it is possible that, despite receiving training, assistant psychologists lacked the experience necessary to deliver the intervention effectively. They also draw attention to the self-help manual, which was written specifically for the study and has found to be ineffective when delivered without any professional facilitation (Fletcher *et al*., 2005). In addition, all patients had already been referred for face-to-face psychological therapy, so it is possible that they had more severe difficulties than those who might normally be considered suitable for self-help,

and also that they perceived self-help as a 'stop-gap' measure, not expecting it to provide a complete solution. Patient expectations are known to be an important factor in the outcome of psychological therapies, including self-help (Osgood-Hynes *et al*., 1998)

Salkovskis *et al*. (2006) recruited a sample of 96 depressed patients via GP practices, and allocated them into 'treatment as usual' and 'self-help' groups. Those in the self-help group received self-help booklets in the post *in addition* to their usual treatment. The booklets were written especially for the study, and particular modules were selected for each person by a computer algorithm on the basis of their questionnaire data. Those included in a post-treatment analysis did not show significant inter-group differences with regard to depressive symptoms (as measured by the BDI), although self-rated knowledge of depression was higher for those in the self-help group. The authors conclude that, in terms of depressive symptoms, unassisted self-help confers no additional benefit to treatment as usual. In studies of this type, however, it is difficult to control for what 'treatment as usual' involves, and it is likely that effective management in primary care (e.g. with anti-depressants) is going to reduce symptoms as well. What is less clear from the above study is whether or not unassisted self-help would have been useful for patients not receiving *any* other treatment (those who opt against medication, for example). Also, despite their efforts, it is always going to be difficult to gauge compliance in 'pure' self-help interventions.

Despite the reservations highlighted by studies like these, the emerging picture is that self-help approaches are effective, at least when compared to no treatment, and possibly when compared to other treatments of established efficacy. It is, however, important to note that these approaches are not a panacea for all clinical problems, and that some clinical presentations represent an ongoing challenge to the development of effective self-help interventions (e.g. Hodgins *et al*., 2001; Ehlers *et al*., 2003).

The foregoing discussion has centred around the use of written self-help materials, either unassisted or facilitated by a clinician. Whilst not the focus of the present study, brief mention should be given to the evidence base for self-help delivered in different modalities. Marks (2000) comments on the increasing use of computers for the delivery of therapy. A number of different multimedia packages have been designed to

administer self-help programmes. These can be made available on computers within clinics, on CD-ROMs that patients can use at home, or via the internet. Examples of specific programmes include *BTSteps*, a self-help behaviour therapy intervention for OCD, which involves the use of an automated telephone system as well as computer system, and which has been found to significantly reduce OCD symptoms, particularly for those completing exposure and response prevention components (Baer & Greist, 1997). *COPE* is another programme which makes use of similar technologies, and which has been found to reduce depression symptoms in a large proportion of those who use it (Osgood-Hynes *et al*., 1998). For anxiety problems, particularly panic and phobia, the use of *Fearfighter*, either in a clinic or via the internet is associated with reduced anxiety symptoms, albeit in a small, uncontrolled study (Kenwright *et al*., 2004). Marks *et al*. (2003) ran a clinic which allowed patients access to the three programmes outlined above, as well as a further one: *Balance* (for non-suicidal depression). Across all problems and interventions, patients improved significantly on generic measures of mental health symptoms, with 80% rating themselves better at least to some degree, after 12 weeks. Although a lot of efficacy studies of computer-based treatments are uncontrolled (Gega *et al*, 2004), these findings suggest that computer-based treatments are worthy of further evaluation and investment.

When discussing the internet as a source of self-help material, it is important to distinguish between self-help and 'internet therapy', during which a patient will communicate with a therapist over the internet in real time (Gega *et al*., 2004). However, some self-help internet resources can be facilitated by therapist contact via email (e.g. Carlbring *et al*., 2005). Also, some of the commercial programmes described above (e.g. *Fearfighter*; Kenwright *et al*., 2004) can be made available for patients over the internet where necessary. In terms of other available resources, Prasad and Owens (2001) remark upon the wealth of material available via the internet, but also note that internet resources are not subject to any mandatory regulation, and as such could be misleading or even harmful. Despite this, the volume of information available strongly suggests that the internet represents a useful resource for a large number of people with mental health problems. Godin *et al*. (2005) reviewed a number of specific websites dedicated to

providing self-help materials, and found that they were of variable quality. It is rare to find author qualifications or declaration of interests on such websites (in most cases, there is no indicated authorship at all), and it is suggested that unregulated sites which make unwarranted claims are potentially exploitative of vulnerable users. Nonetheless, certain self-help resources available over the internet have been found to be effective (Pull, 2006).

Predictors of success in self-help?

A small amount of research has been conducted to identify those patients for whom self-help might be most appropriate (and, indeed, inappropriate). Selection of the most appropriate treatment for an individual, as well as intelligent allocation of resources, make this an important question from both clinical and economic viewpoints (Baillie & Rapee, 2004).

Before looking in more detail at possible predictors of success in self-help, it is worth noting some potential contra-indications. In a study of psychiatric patients with anxiety and/or dysthymic disorders, Tyrer *et al*. (1993) suggested that patients with personality disorders tended not to respond very well to self-help approaches for emotional problems, favouring instead antidepressant treatment. Williams (2003a) makes a handful of further recommendations regarding those for whom self-help might generally be considered to be inappropriate, making reference to sensory, concentration or memory difficulties, and low motivation. Although outcome can be poorer for those with more complex, longstanding mental health problems (Baillie & Rapee, 2004) there is no evidence that severity *per se* should be considered a contra-indication for self-help (McKendree-Smith *et al*., 2003). Gega *et al*. (2005) generated a screening questionnaire to assess the suitability of patients for CCBT. Of the items contributing to an 'unsuitability' judgement, they included present risk of self-harm or suicide; current psychosis or personality disorder; and lack of motivation. Patients who had poor English or were unable to describe the thoughts and behaviours associated with their problem were also considered unsuitable.

Self-efficacy

Bandura (1977) defines self-efficacy as a 'conviction that one can successfully execute the behaviour required to produce the [desired] outcomes' (p.193). He argues that the perceived efficacy of one's own actions to bring about positive changes is a key variable in predicting how well they will engage with and respond to treatment. Specifically, he suggests that self-efficacy affects the initiation and persistence of coping behaviour in the face of difficulties.

Given the posited relationship between self-efficacy and adaptive coping, it is no surprise that this construct has been linked to mental health. Amongst a large sample of adolescents (N = 400), a strong negative correlation between self-efficacy and depression scores were found (Ehrenberg & Cox, 1991). The domain of self-efficacy most closely related to depression was academic self-efficacy, and the authors concluded that a high perceived ability to meet academic commitments was protective against depression in this population. Similarly, Maciejewski *et al*. (2000) identified self-efficacy as a significant mediating factor between stressful life events and depressive symptoms, for those with a history of depression. In yet another population, Arnstein *et al*. (1999) found that chronic pain patients with lower self-efficacy scores were more likely to have higher-rated disability, and to be depressed.

Because self-efficacy appears to be a mediating factor in mental health, Bandura (1977) argues that psychological treatments of all types should aim to enhance self-efficacy, as well as reducing more overt symptoms. Self-help approaches have been suggested to be *particularly* strong at promoting self-efficacy (Richards, 2004; Floyd, 2001). Rogers *et al*. (2002) suggest that self-help approaches are based on the notion that the patient has the necessary abilities and resources to help themselves, and contrast this situation with medication-based treatments which, they argue, can be accused of 'reinforcing a sense of personal helplessness' (p.43). They also suggest that the most effective way of enhancing self-efficacy is to experience performance-attainment (i.e. achieving the desired goal).

As well as being a potentially fruitful target for clinical intervention, there are reasons to suggest that self-efficacy might predict successful outcomes in self-help

treatments. Self-efficacy is a source of motivation (Bandura, 1977), more of which may be necessary for completing self-directed treatments than more traditional therapy (Frude, 2004a). A survey of CBT practitioners identified that patient motivation was an important factor in the decision to provide self-help materials (Keeley *et al*. 2002). Osgood-Hynes *et al*. (1998) also found that self-help treatment via a computer and automated telephone system was more effective for those with higher expectations of success with the treatment. In another study, Mahalik and Kivlighan (1988) found that higher self-efficacy ratings predicted better outcomes for undergraduates given a seven-week manualised self-help course for depression, albeit in a small sample ($N = 52$). They conclude that 'those who persevere in situations that are challenging and require effort succeed in self-help programmes that ask its user to "go it alone"' (p.241).

Locus of control

Rotter (1966) found that an individual's behaviour could be strongly influenced by whether or not they perceived positive reward to be contingent on their own behaviour, or on external, uncontrollable factors. He subsequently developed the Internal-External (I-E) scale to assess perceived general locus of control. Health locus of control is a psychological construct which might plausibly be relevant to self-help and its outcomes. Wallston *et al*. (1978) suggest three distinct aspects of perceived control over one's health, namely internal factors, chance factors and powerful others.

The relationship between health locus of control and mental health has been studied. Holder and Levi (1988) found that the more an individual attributed their health status to chance and powerful others, the more likely they were to experience mental distress as measured by the SCL-90-R symptom checklist (Derogatis, 1983). In a longitudinal study, Frenkel *et al*. (1995) found that internal locus of control in adolescence was predictive of better mental health across the lifespan.

The above findings suggest that a higher internal health locus of control is associated with lower rates of psychiatric morbidity, possibly because individuals are more likely to see themselves as active agents responsible for their own health. Like self-efficacy, internal health locus of control is a construct that psychological therapy

should seek to enhance. Perhaps self-help approaches are in an especially good position to do this, emphasising as they do the role of the individual in their own recovery (Floyd, 2001). Tyrer *et al*. (1993) suggest that the notion of controlling the course of one's own recovery is, in itself, therapeutic. Harackiewics *et al*. (1987) observed that those who stop smoking after self-help interventions make fewer external attributions for their success than those who undergo nicotine replacement therapy, and maintain their abstinence for longer.

It has also been argued that health locus of control can predict outcome in therapy. Schallow (1975) describes a study in which undergraduates attempted to modify a range of self-selected behaviours. Those who were most successful had significantly higher-rated 'internality', as measured on the Rotter (1966) I-E scale, than those who were least successful. Beutler *et al*. (1991) deny that there is a straight-forward link between locus of control and therapeutic success, but suggest a certain pattern of interaction with *type* of therapy. Specifically, they found that those with external loci of control ('externalisers') did better with cognitive therapy than with self-directed therapy which involved independent reading from pre-selected, non-CBT self-help books. However, the opposite pattern was observed for those with internal loci of control ('internalisers'), who achieved better outcomes with the self-directed option than the more traditional cognitive therapy. Mahalik and Kivlighan (1988) found that individuals with high internal locus of control who underwent self-help treatment for depression reported higher treatment satisfaction than those with low internal locus of control, even though (according to symptom measures) they did no better. Even so, Keeley *et al*., (2002) draw attention to the fact that almost half of therapists prescribing self-help materials think that those with internal locus of control will obtain more benefit from them.

Intellectual ability

There has been little research into the role of reading ability, education and intelligence in predicting self-help outcomes. It does, however, seem plausible that patients who are more adept at reading will be at an advantage when working through written materials. A survey of therapists (Keeley *et al*., 2002) revealed that level of education was

considered one of the most important patient factors in the decision to offer written self-help resources. Baillie and Rapee (2004) did not find education or reading habits to be good predictors of self-help success, although the latter was measured somewhat crudely ('have you read a novel in the last month?'). Whilst reading ability and educational level may not strongly influence self-help outcomes, Scogin *et al*. (1989) point out that those who are less educated are more likely to drop out of a treatment of this type. It is possible that poorer readers do not see treatment through, such that final analyses are made on the basis of better readers alone.

Current hypotheses

The present study seeks to examine the following hypotheses in relation to a guided self-help intervention.

1. Compared to pre-treatment, there will be a significant reduction in mental health symptoms at post-treatment, one month and six months follow-up.

2. Patients with greater self-efficacy, internal locus of control, intellectual ability and literacy will show greater pre- to post-treatment improvement in mental health symptoms.

3. Self-efficacy and internal locus of control will be increased, and external attributions of control decreased, at post-treatment, one month and six months.

Method

Participants

All patients referred to the guided self-help clinic in the North East of Edinburgh between April 2006 and March 2007 were invited to take part in the research. Of the 390 referrals received during this period, 173 attended the clinic and agreed to participate. At the time of analysis, 97 patients had completed the treatment and had submitted post-treatment measures. The minimum number of patients required to identify correlations of medium effect size (Cohen, 1992) was 85, assuming an alpha value of 5%, with a power of 80%.

Most participants (85%) were referred by their GP. Every GP in each of the 13 practices in the North East of Edinburgh were sent information about the clinic. Some practices referred frequently, while others made few, if any, referrals. The four practices who referred most frequently accounted for 88 (59%) of participants referred directly by GPs, whilst the four least-referring practices accounted for only 12 (8%).

Referrals were made using a specific referral form (appendix 1). The inclusion criteria on the form indicated that the service was intended for those with mild anxiety, mild depression, stress and/or insomnia. There were also some exclusion guidelines, namely that patients should not be referred if they:

- were not interested in the self-help approach
- were unable to concentrate sufficiently for such an approach
- had visual or intellectual disabilities that might preclude a reading-based approach
- demonstrated recent thoughts of suicide or self-harm
- were currently misusing alcohol or other drugs
- had previously undergone more than one course of psychological therapy
- had previously been referred to psychiatry

These guidelines were agreed by colleagues involved in running similar clinics across Edinburgh, and were based on those devised by professionals elsewhere in the UK (e.g. Williams, 2001; Gega *et al*., 2005).

A minority of referrals (15%) came from the local primary care mental health team, who were also aware of the above referral guidelines.

Materials

Measure of mental health symptoms

As a measure of psychological distress, the Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995a) was chosen. The original DASS is a 42-item questionnaire, each item being a symptom to be endorsed on a 0-3 scale. Patients are asked to complete the questionnaire in reference to the last seven days. In their examination of the factor structure of the scale, Lovibond and Lovibond (1995b) performed a principal components analysis on the DASS responses of 717 non-clinical volunteers, which yielded three factors corresponding to depression, anxiety and stress. The depression and anxiety scales were correlated (r = .42), as were the anxiety and stress scales (r = .46) and depression and stress scales (r = .39). A confirmatory factor analysis found that the three-factor model was the best predictor of variance in DASS responses. They also found that a single common factor explained a proportion of the variance on all three scales (50.4% for depression, 74.0% for anxiety and 77.4% for stress).

Comparisons of the DASS with other widely-used measures have been very favourable. In the above non-clinical sample, the DASS anxiety and depression constructs were found to possess superior discriminant validity to the Beck Depression Inventory (BDI; Beck & Steer, 1987*)* and Beck Anxiety Inventory (BAI; Beck & Steer, 1993). The DASS anxiety scale was found to be strongly correlated with the BAI (r = .81), whilst the DASS depression scale showed a slightly weaker correlation with the BDI (r = .74). Lovibond & Lovibond (1995b) suggest that the weaker correlation between the DASS depression scale and BDI is due to the inclusion in the BDI of items which are not specific to depression, such as irritability and somatic problems.

In a large clinical sample ($N = 437$) the same three-factor model was confirmed as had previously been identified amongst non-clinical volunteers (Brown *et al*., 1997). It was also found that, in the absence of intervention, the scale demonstrated good test-retest reliability over a two-week period. Discriminant validity was also found to be good, as diagnostic groups could be reliably discriminated on the basis of loadings on each of the three factors. These findings were replicated by Antony *et al*. (1998), who extended them to the 21-item version of the DASS (DASS21). They also pointed out that the abbreviated version of the questionnaire, in which only seven items pertained to each of the three constructs, had a 'cleaner' factor structure.

Further studies have provided support for the use of the DASS in the UK. In one study (Crawford & Henry, 2003), DASS questionnaires were completed by 1771 non-clinical respondents, selected to be broadly representative of the UK adult population. Again, the proposed factor structure was found to have good construct validity. In addition, the three subscales and the questionnaire as a whole were found to have excellent reliability. None of the three scales were found to be influenced by demographic variables (such as gender) by a clinically significant extent. A subsequent study by the same authors (Henry & Crawford, 2005) sought to extend these findings to the 21-item form of the DASS, on the basis of a further non-clinical UK sample ($N = 1794$). Like Antony *et al*. (1998), they found that the removal of certain problematic items from the 42-item DASS resulted in less cross-contamination between factors, without compromising reliability.

The above studies justify the use of the DASS as a valid measure of depression, anxiety and stress symptoms. The DASS21 was selected in order to minimise the demands on participants, whilst retaining the reliability and validity of the measure. The fact that the depression, anxiety and stress constructs had face validity was also useful, as it facilitated the interpretation and discussion of the DASS21 with clients, who would recognise these terms. It was also desirable to use a scale that could be reproduced without incurring expense. For the purposes of analysis, the total DASS21 score (DASS21-T) was used as a rough index of overall mental health symptoms (Lovibond & Lovibond, 1995a) in addition to the more specific symptom subscales.

Self-efficacy measure

In the absence of any specific mental health self-efficacy measures, the Generalised Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995) was used. This scale taps into an individual's perceived ability to respond to unfamiliar or challenging situations, and to cope with any obstacles in the process. The 10 items are suggested to load on the single construct of self-efficacy. Early psychometric evaluations on German samples indicated high internal consistency (Schwarzer & Jerusalem, 1995).

Subsequent work has sought to corroborate the validity and reliability of the measure across different cultures. Scholz *et al.* (2002) gathered GSES data from 19,120 respondents in 25 different countries and confirmed the unidimensional factor structure of the measure. While mean self-efficacy values varied across different countries, the overall internal consistency was high (α = .86), and no significant effect of age or professional status was identified.

Regarding the convergent validity of the construct, other studies have investigated the relationships between the GSES and other psychological measures. Luszczynska *et al.* (2005a) found statistically significant correlations between GSES scores and measures of intention to engage in health-preserving behaviours (e.g. exercise) and expectation of positive outcome. Additionally, GSES scores are negatively correlated with depression and anxiety variables, whilst positively correlated with self-esteem and optimism. (Luszczynska *et al*., 2005b)

Locus of control measure

There were a number of possibilities to consider with regard to a locus of control measure. One of the first of such measures, the Rotter (1966) Internal – External Control Scale (I-E) is a useful measure of general locus of control, indicating the extent to which respondents attribute events to individual action or external factors. Use of this measure would have revealed general beliefs about the relative importance of internal and external factors in the causation of events. However, the current study was interested

specifically in locus of control regarding mental health, i.e. the extent to which one believes that their mental health is dependent on internal or external factors.

Two specific mental health locus of control measures have been developed. Hill and Bale (1980) devised the Mental Health Locus of Control Scale, a 22-item scale which seeks to identify beliefs about the relative importance of the patient and clinician in dealing with mental illness. The authors argue that there is a theoretical continuum between 'internal' and 'external' mental health locus of control. At the 'internal' extreme, respondents believe that therapeutic change is contingent on their own actions, whereas a score at the opposite end of the scale reflects the belief that clinicians assert a more important influence over mental health outcome. The authors also devised a companion scale, the Mental Health Locus of Origin Scale, which seeks to tap into beliefs about the respective importance of internal and external factors in the *development* of mental illness.

Unfortunately, while the authors provide some preliminary validity data, there appear to be no subsequent studies to supplement these. Also, in discussion with colleagues, it was felt that certain items would be off-putting to those with mild mental health problems. References to 'psychiatric hospitals', 'serious mental problems', and surrendering 'all responsibility' (pp.151-152) were considered to be reminiscent of outdated mental health stereotypes, and might have been alarming for patients with no experience of mental health services.

A further mental health locus of control scale was proposed by Wood and Letak (1982). It was slightly narrower in scope than that developed by Hill and Bale (1980), and examined mental health locus of control in the context of patient expectations when accessing mental health services. 14 potential patient expectations were generated (e.g. 'to get medication') and clinicians rated each item in terms of their respective 'internality' and 'externality'. These ratings led to two items being classified as 'internal', and four as 'external'. The remaining items were not consistently rated as one or the other, and were discarded.

Again, it was decided that some of the items in this scale were inappropriate to a guided self-help context, since patient are told what to expect when they are referred. It

is unlikely, therefore, that any patients would endorse 'to get medication', or 'to find a place where I can always count on for help' (p.85), which would mean that the measure would be skewed towards the internal.

Since no suitable mental health locus of control measures were obtainable, the Multidimensional Health Locus of Control (MHLC; Wallston *et al*., 1978) was selected. This measure concerns beliefs about factors influencing general health (rather than mental health) but is still more specific than a general locus of control measure (e.g. Rotter, 1966). The MHLC is a 21-item questionnaire, on which each item is endorsed on a six-point scale. Internal (MHLC-I), chance (MHLC-C) and powerful others (MHLC-PO) constructs were defined *a priori*, but have been found to statistically independent (Wallston *et al*., 1978).

Given the widespread recognition of the MHLC scale, and the lack of an acceptable mental health locus of control scale, some authors (e.g. Hoffart & Martinsen, 1991) have asked respondents to complete the questionnaire in such a way as to reflect their beliefs about mental health rather than general health. A similar caveat was included in the MHLC instructions for the present study, in an attempt to increase the specificity of the measure. For the purposes of this study, form A was used.

Measure of intellectual ability

Given the time constraints in the clinic, it was not possible to opt for a comprehensive assessment of cognitive function (e.g. Wechsler Adult Intelligence Scale; Wechsler, 1997). It was therefore decided to use an estimate of premorbid IQ, as obtained on the National Adult Reading Test (NART; Nelson, 1982). This test involves reading fifty words aloud, each of which has an atypical spelling-to-pronunciation relationship. Using normative data obtained from Nelson and Willison (1991), estimates of verbal, performance, and overall (full scale) IQ can be derived.

Research indicates that the NART is a valid measure of current intelligence. Through principal components analysis, Crawford *et al*., (1989) found that NART and WAIS scores loaded heavily on a common factor, and therefore concluded that the NART is a good reflection of verbal intelligence. Most research with the NART has

focussed on its ability to provide premorbid estimations of intelligence, given that NART performance has been found to be relatively unaffected by deteriorating conditions such as dementia (Hart *et al.*, 1986; O'Carroll *et al.*, 1987), and in mental health problems like depression (Crawford *et al.*, 1987). The measure has also been found to possess good inter-rater reliability (O'Carroll, 1987).

Procedure

Referrals to the guided self-help clinic were made by GPs, as well as the primary care mental health team. These referrals were made on dedicated forms, which indicated the inclusion and exclusion criteria for the clinic, as outlined above. Once a referral was received, information about the clinic was sent to the patient, along with a letter inviting them to make contact within a four-week period to arrange an appointment. Once an appointment was arranged, a confirmation letter was sent, along with a questionnaire pack (Appendix 1) comprising the DASS21, information sheet, consent form, GSES and MHLC. There were also three additional questions for use in exploratory analyses:

- How long have you spent in education? (years)
- How much do you enjoy reading? (1 – 6)
- How often do you read? (1 – 6)

At the initial appointment (approximately one hour), completed questionnaires were collected, and a brief assessment of the patient's difficulties was carried out by either a trainee clinical psychologist or a clinical associate. The clinician would guide the patient towards a preliminary cognitive behavioural formulation based on 'the five areas approach' (e.g. Williams, 2006), in order to illustrate potential links between relevant situational, cognitive, emotional, physical and behavioural factors. On the basis of this formulation, the clinician and the patient would agree on suitable printed self-help materials to be worked through over the next 2-3 weeks. These were usually workbooks from *Overcoming Depression* (Williams, 2001), *Overcoming Anxiety* (Williams, 2003b), and *Overcoming Depression and Low Mood* (Williams, 2006). On occasion, these were

supplemented with booklets produced by Newcastle, North Tyneside and Northumberland Mental Health NHS Trust (Newcastle, North Tyneside and Northumberland Mental Health NHS Trust, 2003). Patients were also directed to online audio relaxation exercises if appropriate (GlasgowSTEPS, n.d.)

At the end of the first session, patients were asked to complete the NART, and the number of pronunciation errors was recorded. An appointment was then arranged for 2-3 weeks time, at the agreement of the patient. During this review session (approximately 30 minutes), the introductory materials and exercises would be reviewed collaboratively, in order to discuss particular difficulties and to develop the approach further if appropriate. A final review session was then arranged for a further 2-3 weeks' time.

At the final session (approximately 30 minutes) the clinician and patient would attempt to troubleshoot any further problems with the self-help approach, and to summarise any useful principles. At the end of the final session, patients were asked to complete the DASS21, GSES and MHLC. The DASS21 was scored with the patient present, in order that the pre- and post-treatment scores could be discussed with them.

A further questionnaire pack (comprising the DASS21, GSES and MHLC) was sent to patients one month after their last appointment, along with a stamped addressed envelope. Regardless of whether this was returned, a further identical pack was sent six months after their last appointment.

Design and analysis

DASS21 scores, by subscale as well as the overall total, were used to examine improvements in mental health symptoms at post-treatment, one month and six months follow-up. In a repeated measures design, each patient's pre-treatment measure served as a baseline control for the purposes of comparison. A similar procedure was used to look for specific changes in GSES and MHLC measures.

For the purpose of correlational analyses, the dependent variable was the raw improvement (post-treatment minus pre-treatment score) on the DASS21 subscales and total. Relationships were sought between these improvement indices and GSES, MHLC

measures, enjoyability and frequency of reading, and verbal IQ as derived from the NART.

Results

General information

390 referrals were received to the guided self-help clinic over the course of one year (April 2006 to March 2007 inclusive). Patient pathways with respect to the various data collection phases are summarised in Figure 1. On average, initial appointments took place 3.7 weeks after receipt of each referral. 173 patients agreed to take part in the study, of which 110 (64%) were female and 63 (36%) were male. All participants were aged between 18 and 64 (M = 36.6; SD = 10.7). 58 (34%) were taking medication for a mental health problem at the time of referral, whilst 115 (66%) were medication free.

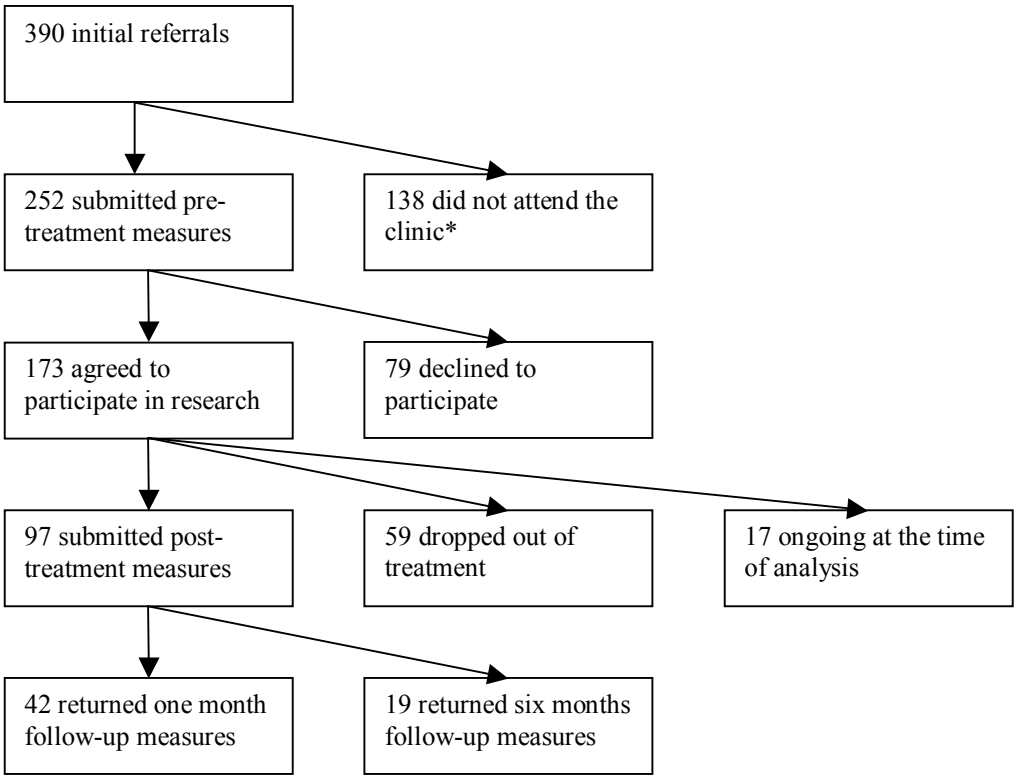

Figure 1. The pathways of patients at each stage of data collection
*Did not arrange an appointment / did not attend / declined contact / redirected to another service

Regarding the source of the referral for participants, 148 (86%) came directly from GPs, whilst a further 25 (14%) came from the primary care mental health team. Referrals from GPs were usually made on a specific referral form, which asked the referrer to specify an alternative course of referral in the absence of guided self-help. 66 (45%) of GP-referred patients would have been seen more often by their GP in the absence of a guided self-help service, 44 (30%) would have been referred to voluntary organisations, 42 (28%) would have been referred to local NHS mental health services, whilst 27 (18%) would have been managed with medication alone.

For the purposes of further analysis, patients who were recruited and whose guided self-help treatment was still ongoing (N = 17) were excluded, leaving 156 who had either completed treatment or dropped out.

Follow-up data were gathered for patients who completed the treatment. At the time of analysis, 94 of 97 completers (97%) had been sent measures for one month follow-up. 42 (45%) of those who had been sent these measures had returned them. For six months follow-up, 50 out of 97 completers (52%) had been sent measures, of which 19 (38%) had returned them.

Efficacy of guided self-help

Hypothesis 1: Compared to pre-treatment, there will be a significant reduction in mental health symptoms at post-treatment, one month and six months follow-up.

DASS21 scores at pre-treatment, post-treatment, one month and six months follow-up are shown in Figure 2. In order to determine whether mental health symptoms improved after guided self-help, paired t tests were used to compare pre-treatment DASS21 scores to post-treatment, one month, and six months follow-up scores. The t and two-tailed p values are provided in Table 1.

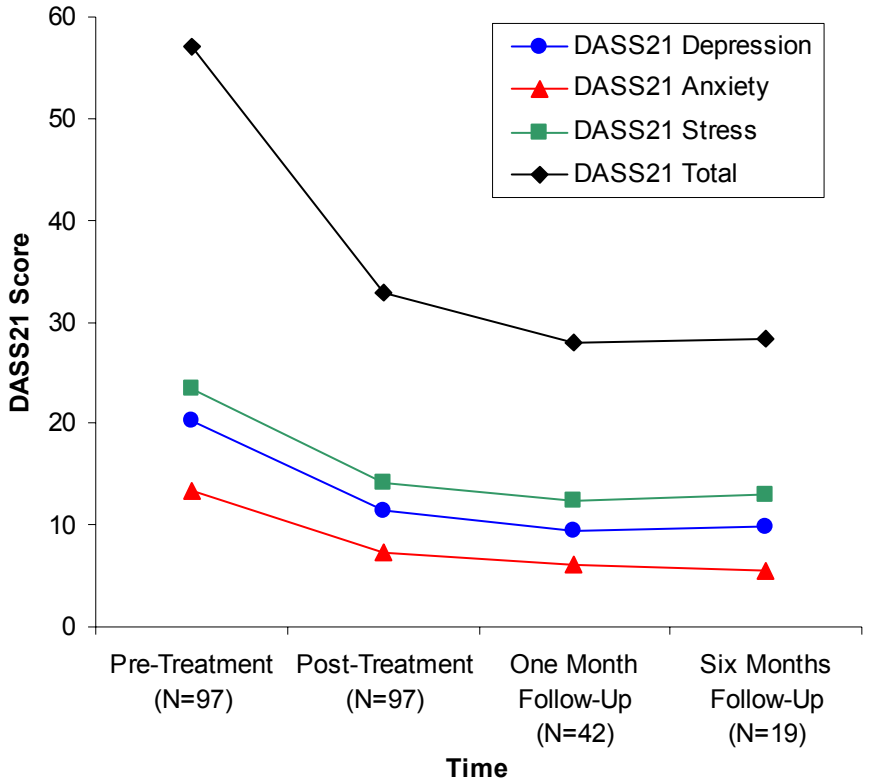

Figure 2. Average DASS21 scores for completers, at pre-treatment, post-treatment, one month and six months follow-up

Table 1. Paired t tests comparing pre-treatment DASS21 scores to those at post-treatment, one month and six months.

	Post-Treatment ($N = 97$)	One Month Follow-Up ($N = 42$)	Six Months Follow-Up ($N = 19$)
DASS21 Depression	$t = 7.97$ $p < .001$	$t = 5.16$ $p < .001$	$t = 3.42$ $p = .003$
DASS21 Anxiety	$t = 7.32$ $p < .001$	$t = 5.36$ $p < .001$	$t = 4.18$ $p < .001$
DASS21 Stress	$t = 9.75$ $p < .001$	$t = 5.82$ $p < .001$	$t = 3.99$ $p < .001$
DASS21 Total	$t = 9.83$ $p < .001$	$t = 6.28$ $p < .001$	$t = 4.68$ $p < .001$

A graph of DASS21 scores for only those patients who returned six month follow-up measures (Figure 3) reflects a similar pattern as to that seen across completers as a whole (Figure 2).

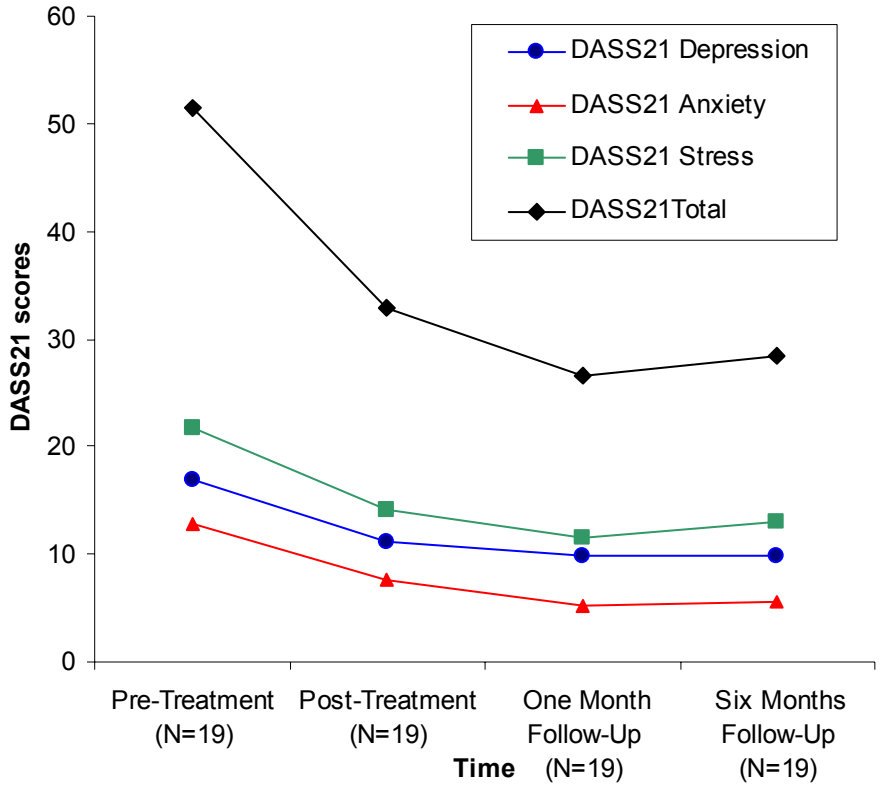

Figure 3. Average DASS21 scores for only those patients who returned six months follow-up measures.

'Intent-to-treat' analysis

Given the high drop out rate (38%) a conservative 'intent-to-treat' analysis was carried out on all recruited participants who had either completed or dropped out of treatment (N = 156). Post-treatment DASS21 scores for non-completers (N = 59) were assumed to be equal to pre-treatment scores. Under these conditions, a paired t test still revealed post-treatment DASS21 scores to be significantly lower than those recorded at pre-treatment. This pattern was observed for each of the three individual DASS21 subscales as well as the total. The t and p values from these analyses are set out in Table 2.

Table 2. Paired t test comparing pre- and post-treatment DASS21 scores, under 'intent-to-treat' conditions

	t	*p* (two-tailed)
DASS21 – Depression	7.14	< .001
DASS21 – Anxiety	6.66	< .001
DASS21 – Stress	8.33	< .001
DASS21 – Total	8.38	< .001

Grouping the sample by medication status

Of those patients (N = 156) who completed or dropped out of the guided self-help treatment, 54 (35%) were receiving medication for a mental health problem whilst 102 (65%) were medication free. Of those who completed the guided self-help treatment (N = 97), Figure 4 shows the mean pre- and post-treatment DASS21 totals for both subgroups.

19 (35%) of the 'medication' group dropped out of treatment, as did 40 (39%) of the 'no medication' group. All patients in the 'medication' and 'no medication' groups were considered in isolation. Using paired t tests under 'intent-to-treat' conditions, significant pre- to post-treatment improvement in all DASS21 subscales were found for both groups. The t and two-tailed p values are included in Table 3.

Table 3. Repeated measures t tests comparing pre- and post-treatment DASS21 scores, under 'intent-to-treat' conditions, for patients with and without medication

	Medication (N = 54)	No Medication (N = 102)
DASS21 – Depression	t = 5.23 p < .001	t = 5.00 p < .001
DASS21 – Anxiety	t = 4.57 p < .001	t = 4.93 p < .001
DASS21 – Stress	t = 5.23 p < .001	t = 6.47 p < .001
DASS21 – Total	t = 5.75 p < .001	t = 6.17 p < .001

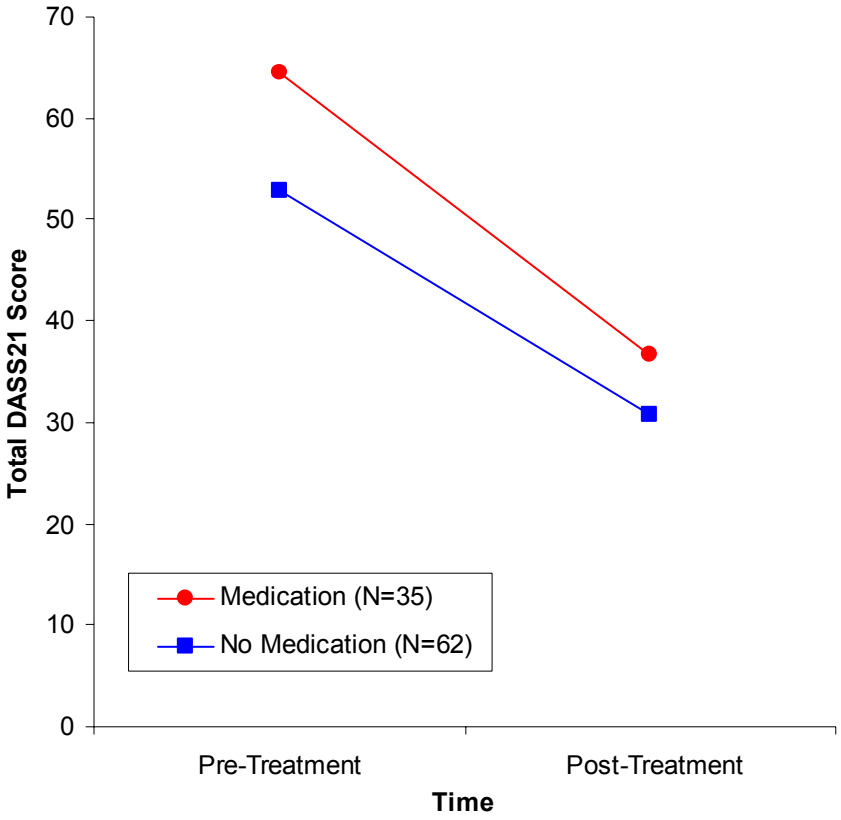

Figure 4. Mean pre- and post-treatment DASS21 scores for completers, with and without medication

In order to see whether completers in the 'medication' group made more substantial improvements than those in the 'no medication' group, a two-way ANOVA was used, with pre- and post-treatment representing two levels of the within-group factor, and medication status used to define two separate groups. All DASS21 subscales showed a main effect of time. A main effect of medication status was noted with regard to total DASS21 score, suggesting that this score was higher in the 'medication' group when pre- and post-treatment scores are collapsed. A significant interaction between the two factors on the depression subscale suggest that the extent of improvement was greater for the 'medication' group on this subscale, but not on the others. Results from this analysis are summarised in Table 4.

Table 4. Two-way ANOVA comparing DASS21 scores for 'medication' and 'no medication' groups across two time points (pre- and post-treatment)

	Main Effects		
	Time	Medication	*Interaction*
DASS21 – Depression	$F = 69.80$ $\mathbf{p < .001}$	$F = 4.24$ $p = .420$	$F = 4.24$ $\mathbf{p = .042}$
DASS21 – Anxiety	$F = 50.50$ $\mathbf{p < .001}$	$F = .407$ $p = .525$	$F = .154$ $p = .695$
DASS21 – Stress	$F = 88.26$ $\mathbf{p < .001}$	$F = 3.70$ $p = .057$	$F = .710$ $p = .790$
DASS21 – Total	$F = 95.53$ $\mathbf{p < .001}$	$F = 4.14$ $\mathbf{p = .045}$	$F = 1.30$ $p = .257$

In order to generate an effect size for the guided self-help treatment, the pre- and post-treatment means were compared for the 'no medication' group, under 'intent-to-treat' conditions. This was to prevent the effects of medication from inflating the apparent effect of the guided self-help treatment, and to counter the potentially biasing effects of drop-out. Effect sizes were calculated by dividing the pre- to post-treatment difference by the pooled standard deviation.

The calculated effect sizes were .35 for depression, .34 for anxiety, .56 for stress and .48 for the total DASS21 score. When effect sizes are generated under slightly less conservative conditions, comparing pre- and post-treatment DASS21 means for 'no medication' *for completers only*, effect sizes are slightly larger: .61 for depression, .71 for anxiety, .96 for stress and .86 for the overall total.

Factors related to therapeutic outcome

Hypothesis 2: Patients with greater self-efficacy, internal locus of control, intellectual ability and literacy will show greater pre- to post-treatment improvement in mental health symptoms.

In order to identify those factors (if any) that were related to mental health outcome, participants who completed the treatment were considered in isolation (N = 97). In addition to the raw improvement on DASS21 subscales and total, a further improvement index was generated in which the total DASS21 improvement was expressed as a percentage of the pre-treatment DASS21 total, in order to reduce any potential influence of regression to the mean. Pearson correlations were performed in order to look for the hypothesised relationships between improvements on the DASS21 and the pre-treatment GSES, MHLC and literacy measures, the results of which are summarised in Table 5. The p values reflect two-tailed hypotheses.

Table 5. Pearson correlations between improvement indices and suggested pre-treatment predictors

	Pre- to Post-Treatment Improvement				
	DASS21-D	DASS21-A	DASS21-S	DASS21-T	DASS21-T%
GSES	r = -.084 p = .418	r = -.230 ***p* = .024**	r =-.024 p = .819	r = -.106 p = .306	r =.015 p = .884
MHLC-I	r =.030 p = .769	r = -.081 p = .432	r = -.094 p = .360	r = -.051 p = .623	r = -.046 p = .659
MHLC-C	r =.011 p = .915	r =.078 p = .452	r =.086 p = .402	r =.065 p = .520	r =.055 p = .597
MHLC-PO	r = -.057 p = .587	r = -.076 p = .460	r = -.188 p = .067	r = -.125 p = .226	r = -.071 p = .492
Years in Education	r = -.042 p = .682	r = .017 p = .871	r = .010 p = .924	r = -.009 p = .928	r = .077 p = .457
Enjoyment of Reading	r = .067 p = .516	r = .006 p = .952	r = .165 p = .107	r = .097 p = .349	r = .157 p = .126
Frequency of Reading	r = .004 p = .967	r = -.066 p = .523	r = .130 p = .206	r = .031 p = .767	r = .056 p = .570
Verbal IQ	r = -.103 p = .328	r = -.013 p = .900	r = .051 p = .627	r = -.027 p = .796	r = -.029 p = .785

DASS21-T%: Pre- to post-treatment change in DASS total, as a percentage of the pre-treatment total

A negative correlation was found between pre-treatment GSES score and extent of pre- to post-treatment change on the DASS21 anxiety scale. Since higher DASS21 scores reflect greater symptomology, this suggests that higher pre-treatment self-efficacy was associated with smaller improvement on the DASS21 anxiety scale. The relationship was in the opposite direction to what was expected, but may simply represent a chance finding, which is particularly likely given the number of analyses performed. Further investigation revealed that the relationship is negated by the removal of two outlying data points ($r = .165$, $p = .112$).

Changes in self-efficacy and locus of control

Hypothesis 3: Self-efficacy and internal locus of control will be increased, and external attributions of control decreased, at post-treatment, one month and six months.

Mean GSES and MHLC scores at the four respective time points are summarised in Figures 5 and 6 respectively.

Paired t tests were used to compare pre-treatment GSES and MHLC scores to those obtained post-treatment, at one month and at six months. The resulting *p* values are summarised in Table 6.

Table 6. *t* and *p* values (two-tailed) from paired t tests, comparing pre-treatment GSES and MHLC scores to those obtained at post-treatment, one month, and six months

	Post-Treatment ($N = 97$)	One Month Follow-Up ($N = 42$)	Six Months Follow-Up ($N = 19$)
GSES	$t = 6.89$ **$p < .001$**	$t = 1.70$ $p = .097$	$t = 3.26$ **$p = .004$**
MHLC - I	$t = 2.45$ **$p = .016$**	$t = .729$ $p = .470$	$t = .943$ $p = .358$
MHLC - C	$t = .302$ $p = .764$	$t = .839$ $p = .406$	$t = 3.14$ **$p = .006$**
MHLC - PO	$t = .258$ $p = .797$	$t = 2.17$ **$p = .036$**	$t = .727$ $p = .476$

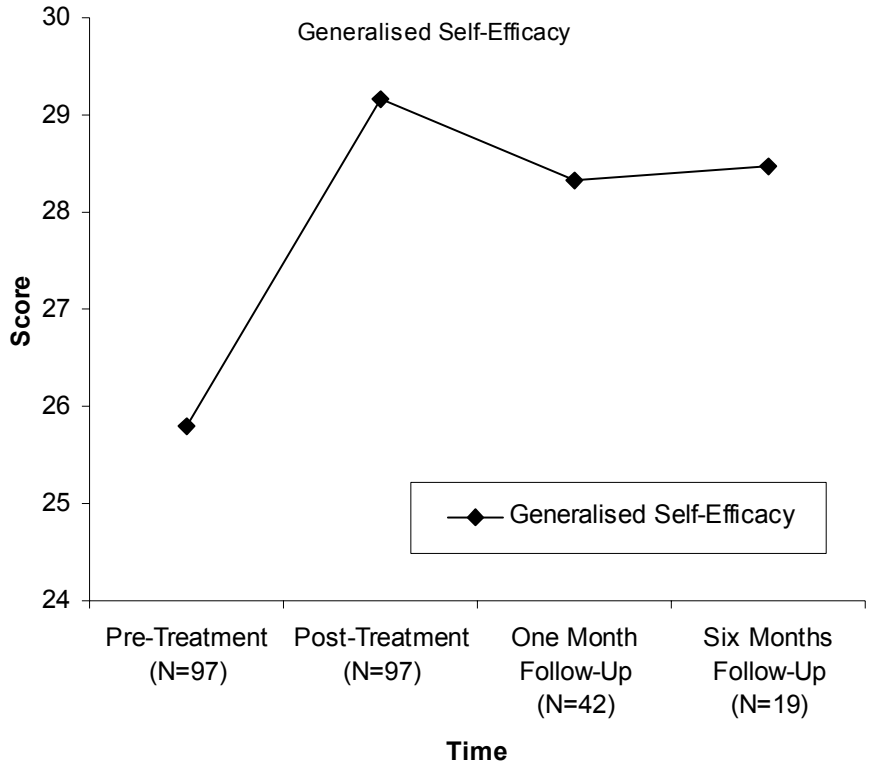

Figure 5. Mean GSES scores at the four time points.

Compared to pre-treatment scores, GSES was significantly increased at post-treatment, and six months follow-up. MHLC-I was significantly increased post-treatment, but this increase was not present at one month or six months. Average MHLC-C scores decreased relative to pre-treatment, but this difference was only present at six months follow-up. A significant decrease in MHLC-PO was noted at one month, but at no other time point.

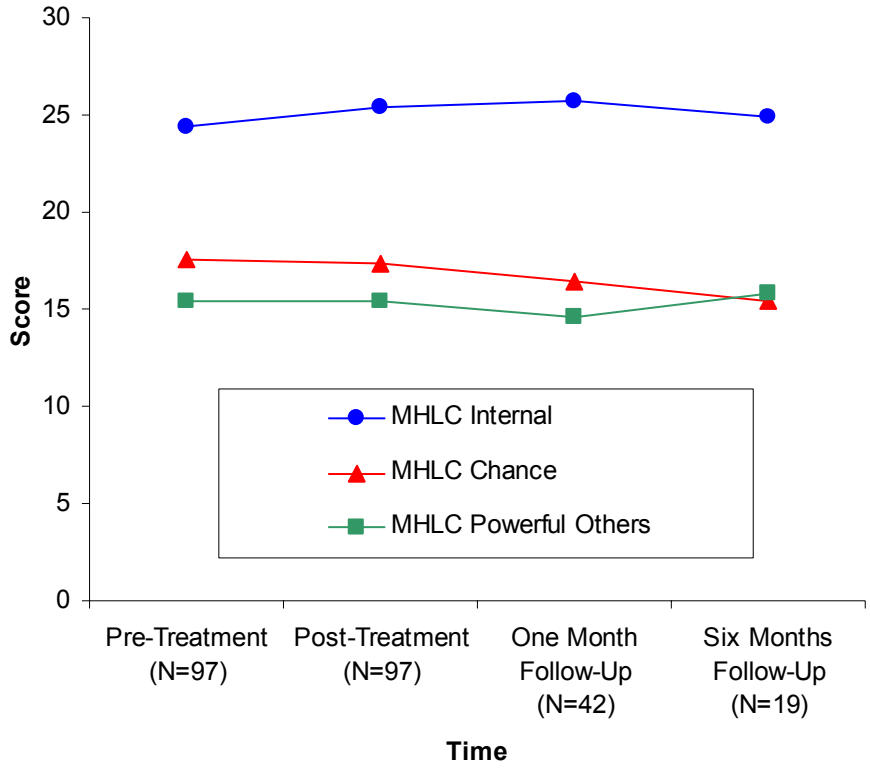

Figure 6. Mean MHLC scores at the four time points.

Patterns of change for 'better' and 'poorer' improvers

Exploratory analyses were performed to investigate whether this pattern of change in GSES and MHLC measures was similar for those obtaining different levels of therapeutic success. The extent of therapeutic improvement (as expressed in the difference between pre- and post-treatment DASS21 total) was used to divide the data set. The median improvement score was 24. Those who improved by less than 24 points ($N = 42$) were classified as 'poorer improvement', with those improving by more than 24 points ($N = 48$) being labelled 'better improvement'. Those improving by exactly 24 points ($N = 7$) were discarded for the purposes of this analysis. The selection of the median point as a place to split the data set was essentially arbitrary, since the scores showed a reasonably normal distribution.

The two subgroups of completers ('better improvement' and 'poorer improvement') were analysed separately, in order to see whether they showed different

patterns of pre- to post-treatment changes in GSES and MHLC. Given the exploratory nature of these analyses, two-tailed hypotheses were used, predicting change in GSES and MHLC measures in either direction.

The pattern of change in MHLC and GSES for completers with 'better improvement' is displayed in Figure 7, while the corresponding pattern for completers with 'poorer improvement' is shown in Figure 8.

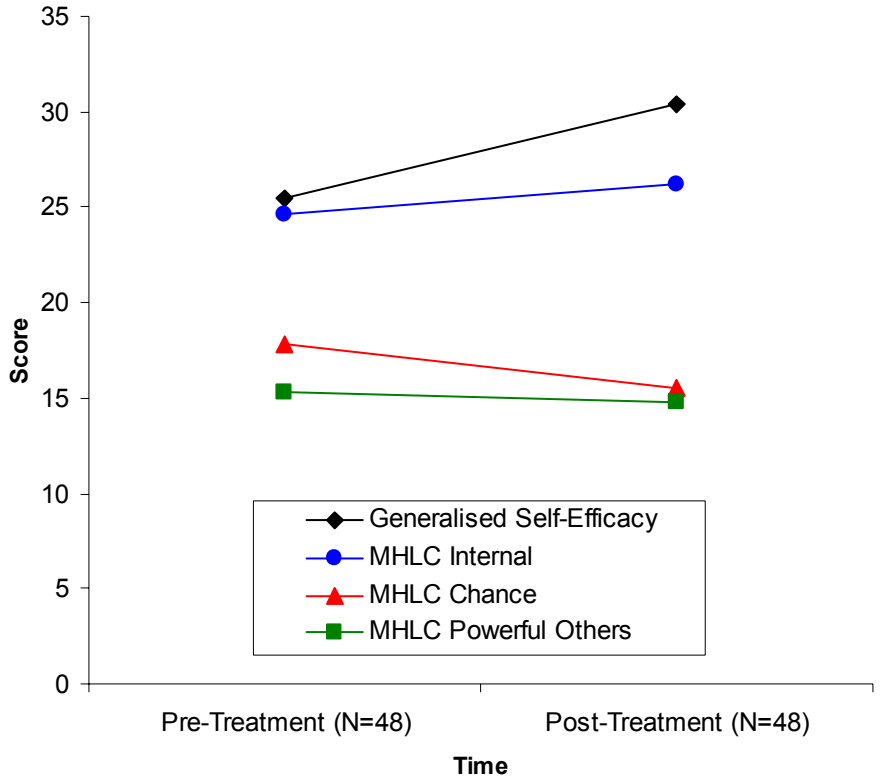

Figure 7. Average pre- and post-treatment GSES and MHLC scores for patients with 'better improvement'

Pre- and post-treatment GSES and MHLC measures were compared, both for those obtaining 'better improvement' ($N = 48$) and those obtaining 'poorer improvement' (N = 42). The results of the relevant paired t tests are summarised in Table 7.

In the 'better improvement' subgroup, significant pre- to post-treatment increases in GSES and MHLC-I were observed, as was a significant decrease in MHLC–C. The effect size for each of these changes was .82, .32, and .44 respectively. No significant

pre- to post-treatment change was noted in MHLC–PO. In the 'poorer improvement' subgroup, the post-treatment GSES was found to be significantly greater than pre-treatment GSES (ES = .38) and MHLC-C also underwent a significant pre- to post-treatment increase (ES = .51). No changes were observed in MHLC-I or MHLC-PO.

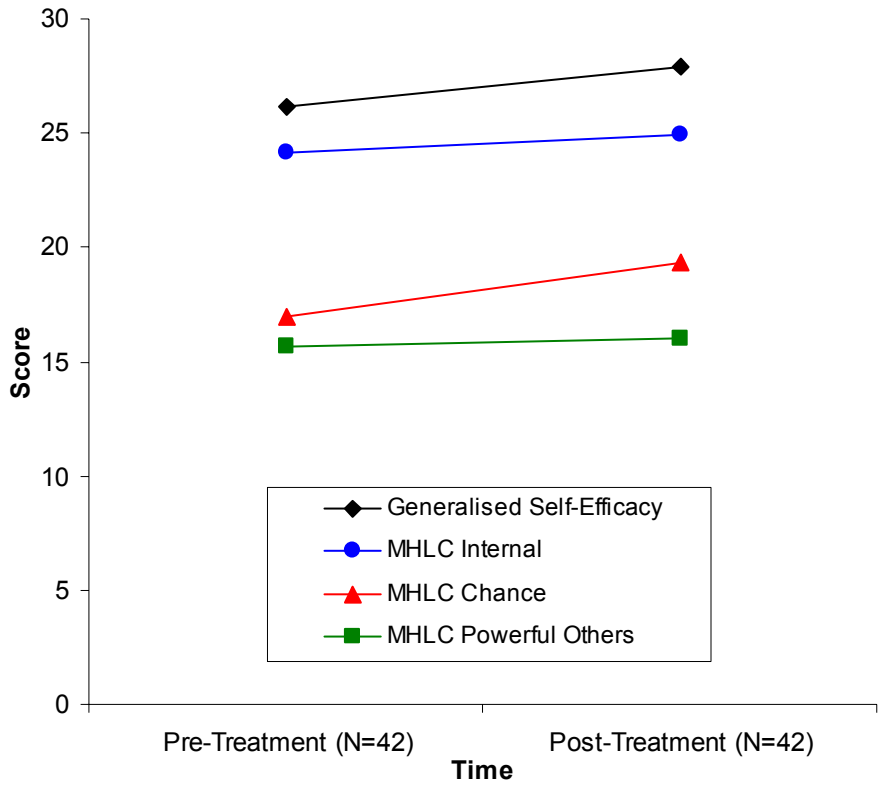

Figure 8. Average pre- and post-treatment GSES and MHLC scores for patients with 'poorer improvement'

Table 7. Paired t tests comparing pre- and post-treatment GSES and MHLC for the 'better' and 'poorer' improvement subgroups

	'Better improvement' (*N*=48)			'Poorer improvement' (*N*=42)		
	Pre-treatment Mean (SD)	Post-treatment Mean (SD)	*t* and *p* values	Pre-treatment Mean (SD)	Post-treatment Mean (SD)	*t* and *p* values
GSES	25.50 (6.00)	30.44 (4.92)	*t* = 7.53 ***p* < .001**	26.13 (4.95)	27.93 (4.07)	*t* = 2.29 ***p* = .027**
MHLC – I	24.64 (5.08)	26.19 (4.50)	*t* = 2.28 ***p* = .027**	24.03 (4.49)	24.90 (3.30)	*t* = 1.40 *p* = .168
MHLC – C	17.83 (4.84)	15.48 (5.66)	*t* = 2.92 ***p* = .005**	16.95 (4.41)	19.35 (4.88)	*t* = 2.99 ***p* = .005**
MHLC - PO	15.27 (4.95)	14.79 (5.08)	*t* = .686 *p* = .496	15.88 (4.15)	15.98 (4.90)	*t* = .155 *p* = .877

Differences between completers and non-completers

Further exploratory analyses were used to identify the ways in which completers (*N* = 97) and non-completers (*N* = 59) might differ. Independent samples t tests were used to compare the two groups with respect to continuous variables gathered at the pre-treatment phase. The respective group means and standard deviations for each variable are set out in Table 8.

Those who did not complete the guided self-help treatment were found to have significantly higher pre-treatment scores on the DASS21 depression and anxiety subscales, as well as a higher total DASS21 score, than those who did complete the treatment. Those who completed the treatment tended to report a longer time spent in education, and rated their enjoyment of reading higher. There was a non-significant trend for those completing treatment to have a higher verbal IQ.

Table 8. Means and standard deviations for pre-treatment variables, for completers and non-completers

Pre-Treatment Variable	Completers		Non-Completers		*t*	*p* (two-tailed)
	M	(SD)	*M*	(SD)		
Age	37.6	(10.7)	35.5	(10.8)	1.23	.220
DASS21 - Depression	20.1	(11.6)	24.3	(10.9)	2.19	**.030**
DASS21 - Anxiety	13.3	(9.1)	18.4	(11.6)	3.02	**.003**
DASS21 – Stress	23.5	(8.7)	25.3	(9.3)	1.20	.234
DASS21 – Total	57.0	(24.6)	67.9	(26.0)	2.62	**.010**
MHLC – Internal	24.4	(5.0)	24.4	(5.9)	.00	.997
MHLC – Chance	17.5	(4.8)	17.5	(5.0)	.08	.934
MHLC - Powerful Others	15.4	(4.5)	16.3	(5.6)	1.07	.288
GSES	25.8	(5.5)	24.9	(6.1)	.96	.341
Years in Education	15.6	(3.4)	14.1	(3.0)	2.71	**.007**
Reading Enjoyment	4.8	(1.3)	4.3	(1.6)	2.16	**.033**
Reading Frequency	4.1	(1.3)	3.9	(1.5)	.86	.390
Verbal IQ	112.9	(8.4)	109.7	(9.2)	1.94	.054

Discussion

The findings of the study will be discussed with respect to the three hypotheses. Possible interpretations of the findings will be explored, as well as the implications they might have in practical or theoretical terms. In addition, certain important caveats for the findings will be outlined. Strengths and limitations of the study in general will be discussed, followed by some possible future directions for research.

Interpretation of results

Each hypothesis will be considered in turn.

> *Hypothesis 1: Compared to pre-treatment, there will be a significant reduction in mental health symptoms at post-treatment, one month and six months follow-up.*

DASS21 scores, on each subscale and the overall total, were significantly lower at post-treatment, one month and six months follow-up than at pre-treatment. This suggests that mental health symptoms of those completing guided self-help treatment tend to improve significantly, and that these gains are maintained for at least six months.

As with other studies of self-help (e.g. Rosen, 1987) a significant proportion of recruited patients (38%) did not complete the treatment. The implications of this drop-out rate will be discussed later. However, even when it is assumed that those who dropped out of treatment experienced no mental health improvement whatsoever, there was still a clear pattern of pre- to post-treatment improvement in the sample as a whole. Therefore, the extent of improvement in those who did complete is sufficient to offset the conservatively-hypothesised non-response of those who dropped out.

In the absence of a control group, it would be inappropriate to automatically attribute the observed improvements to the guided self-help treatment without highlighting certain considerations. In particular, whilst no patients were receiving concurrent psychological therapy during the self-help treatment, there was a significant proportion taking prescribed medication for a mental health problem. These patients had

usually commenced medication at least three weeks prior to baseline measures being taken, but nonetheless it is possible that a degree of mental health improvement was attributable to medication. However, a clear pattern of pre- to post-treatment improvement was observed for patients who were medication-free as well as those who were on medication. Even though the 'medication' group improved by a significantly greater extent on the DASS21 depression scale, the finding that robust improvements are also seen in those who are medication free would suggest that improvements in the overall sample cannot be attributed entirely to medication.

It is difficult to compare effect sizes from an uncontrolled study to those from randomised controlled trials. The latter are based on comparisons between treatment and control groups; where the control group receives a placebo treatment, the effect size of the active treatment will not reflect placebo effects. Similarly, effect sizes calculated from comparisons between active treatment and waiting list will not reflect spontaneous remission, on the assumption that it is equally likely in both groups. The most conservative effect sizes in the present study were markedly lower than those found in previous meta-analyses of self-help. However, when only those patients who had *completed* the treatment were considered, the effect size for pre- to post-treatment improvement for DASS21 total was .86. This figure is comparable to the effect size obtained in a meta-analysis of bibliotherapy for depression (Cuijpers, 1997; ES = .82), and also to that obtained by Gloaguen *et al*. (1998) in their meta-analysis of cognitive therapy for mild-to-moderate depression (ES = .82). The conclusion (albeit tentative) of the present study is that guided self-help can bring about reliable improvement in mental health status, which may be comparable to other modes of psychological therapy.

The implications of these findings, taken with those of previous studies, is that self-help (guided or otherwise) represents a viable treatment option for those with depression, anxiety and stress. Self-help approaches have several advantages over more conventional therapy both from the point of the view of the patient and the healthcare provider: self-help materials are inexpensive (Richards, 2004), can be made readily accessible (Frude, 2004a), and can reduce the demands on professional time, both in the sense of delivering the treatment and in lower future consumption of professional

services after a successful intervention (White, 1995). Self-help approaches can also be described as promoting positive ideologies about mental health and its treatment, leading to patient empowerment (Richards, 2004) and a reduction in helplessness (Rogers *et al*., 2002). Given these advantages, the possibility that self-help approaches might also be of similar effectiveness to face-to-face therapy begins to make them look like a very attractive treatment option indeed.

> *Hypothesis 2: Patients with greater self-efficacy, internal locus of control, intellectual ability and literacy will show greater pre- to post-treatment improvement in mental health symptoms.*

Only one pre-treatment measures were found to be related to pre- to post-treatment change in DASS21 scores. GSES was found to be negatively correlated with decreased DASS21-A, which is to say that higher pre-treatment self-efficacy was associated with smaller improvement in anxiety symptoms. This relationship is in the opposite direction to what was predicted. However, given that the *p* value for this assocation is greater than .01, it is highly likely that it represents a spurious finding, given the number of analyses carried out.

Self-efficacy

The lack of a positive relationship between generalised self-efficacy and improvement in mental health symptoms with guided self-help is surprising. Bandura (1977) predicts that self-efficacy is an important determinant of the extent to which a patient will engage with and respond to psychological therapy. It seems reasonable that a greater perceived ability to bring about desirable changes will be associated with higher expectations of success, along with more focussed and persistent efforts towards these goals.

Other authors have suggested that high self-efficacy is particularly advantageous in self-help approaches. Frude (2004a) argues that a greater degree of motivation is needed in order to complete self-directed treatments, and there is a widely-held view amongst therapists that motivation is an important factor in deciding whether or not to

supplement a patient's treatment with self-help material (Keeley *et al*., 2002). It is possible that self-efficacy is an important source of motivation (Bandura, 1977): it is difficult to imagine that a person who does not feel that they have the ability to succeed will feel particularly motivated to expend effort in trying.

The present finding that self-efficacy appears unrelated (or even negatively related) to mental health improvements in guided self-help seems to contradict a number of other studies. Mahalik and Kivlighan (1988) found that generalised self-efficacy was positively correlated with improvement in depression symptoms after a seven-week self-help treatment. They also found that patients with higher initial self-efficacy were more likely to endorse the treatment as satisfactory. They conclude that success in self-help programmes is predicted by a tendency to persist in challenging situations which require sustained personal effort. It is difficult to be certain about the cause of this discrepancy from the results of the present study. The absence of a positive relationship between self-efficacy and improvement in mental health symptoms in the current study is unlikely to be down to statistical power: Mahalik and Kivlighan (1988) based their analyses on a relatively small sample of 52, whereas the present study analysed 97 patients who completed treatment, a sufficient number to identify a relationship of medium effect size if one existed (Cohen, 1992). The relationship between self-efficacy and improvement in depression symptoms, as identified by Mahalik and Kivlighan (1988), must have been relatively large in order for them to identify it within their restricted sample, which makes it quite difficult to account for.

The measure of self-efficacy used in the Mahalik and Kivlighan (1988) study was an earlier scale (Tipton & Worthington, 1984) from that used in the present study (Schwarzer & Jerusalem, 1995). Both scales purport to be measures of generalised self-efficacy, and without access to the individual items on the earlier scale, it is difficult to be specific about how the scales might differ. Mahalik and Kivlighan (1988) also used the Beck Depression Inventory (BDI; Beck & Steer, 1987) rather than the DASS21, although the latter has been found to be compare favourably to the former in terms of validity, specificity and sensitivity (e.g. Antony *et al*., 1998).

The self-help treatment studied by Mahalik and Kivlighan (1988) extended over a longer period to that of the present study (seven weeks compared to around four weeks). One might assume that self-efficacy would be a more important variable as the length of time increased over which motivation needed to be sustained. This is one possible, albeit speculative, interpretation of the discrepancy.

A further study (Osgood-Hynes et al., 1998) found that expectations of success from a 12-week self-help programme were predictive of improvements on the Hamilton Rating Scale for Depression (Hamilton, 1960). However, it is not clear that positive expectation of outcome is the same as self-efficacy here. Patient expectations were gathered on the basis of the perceived 'logicality' of the self-help treatment. In other words, positive expectations of success were attributed when patients thought that the treatment was appropriate, regardless of their perceived ability to carry it out. In reality, an expectation of success might be based on both internal and treatment factors. The findings of Osgood-Hynes *et al*. (1988) simply suggest that people are more likely to do well in self-help programmes when they view such a treatment as an appropriate option in their circumstances.

It is worth drawing attention to the fact that the measure of self-efficacy used in the present study was a generalised measure (Luszczynska *et al*., 2005). It is not necessarily the case that self-efficacy is fixed across different domains. It might be, for example, that one feels highly able to exert a positive influence over one's health, but not over one's career. The lack of a positive relationship between self-efficacy and mental health improvements in this study might be a result of using an over-generalised measure of self-efficacy. It would have been ideal to measure self-efficacy as it specifically pertained to mental health outcomes, but no suitable measure was found to exist.

Although a number of possible explanations can be suggested for the lack of correlation between most of the mental health improvement indices and self-efficacy, the significant negative correlation between anxiety improvement and self-efficacy is more difficult to explain. It may well be a spurious finding, especially given the number of analyses performed, and the negating of the association by the removal of two

outliers. It would, however, be worthwhile to see whether this pattern is replicated in future studies of self-help.

At face value, the present findings suggest that high self-efficacy confers no advantage in guided self-help approaches, a conclusion that can only be drawn tentatively given the findings of previous findings (especially Mahalik and Kivlighan, 1988). This conclusion, if justified on the basis of subsequent research, would have certain important implications for self-help approaches. In particular, it would suggest that low self-efficacy need not necessarily be a contra-indication to offering a self-help treatment (indeed, it might even be an advantage!) It is likely that a significant proportion of those with emotional difficulties have low self-efficacy (e.g. Ehrenberg & Cox, 1991) but this need not necessarily preclude them from self-help treatments.

Locus of control

With regard to locus of control in guided self-help, pre-treatment MHLC scores were found to be unrelated to extent of mental health symptom improvement with guided self-help. This was a somewhat surprising finding, given that those with greater internal locus of control might be expected to apply themselves more diligently to the self-help materials, perceiving that the responsibility for the outcome lies with *them*, rather than the professional facilitator of the intervention. Also, it might be assumed that a person who places more stock in chance factors to improve their situation might invest less effort in self-help, as they are more likely to think that the outcome depends on factors outwith their control.

This intuition appears to be common amongst therapists who prescribe self-help materials to their clients (Keeley *et al*., 2002), but is not always supported by the evidence. Mahalik and Kivlighan (1988) found that patients with a higher internal locus of control showed no greater reduction in depression symptoms after a seven week self-help program, although they did express greater satisfaction with the treatment. One possible interpretation of this finding is that patients with greater internal locus of control might perceive a self-help approach as a highly appropriate treatment, even though they might not have experienced a reduction in symptoms.

While the findings of Mahalik and Kivlighan (1988) do not contradict those of the present study, there are at least two further studies in which individuals with greater internal locus of control *have* been found to obtain more benefit from self-help programmes. Schallow (1975) found that undergraduates with high 'internality' were more successful at modifying self-selected behaviours than those with low 'internality'. However, it is important to note that 'success' was rated subjectively by each individual student on a 1-7 scale. It might be argued, therefore, that this measure is more akin to the success index in the Mahalik and Kivlighan (1988) study, i.e. the *perceived* appropriateness or utility of the intervention rather than the objective outcome.

Beutler *et al*. (1991) found that 'internalising' patients obtained a greater reduction in depression symptoms after supportive, self-directed therapy than from more traditional cognitive therapy, and identified the reverse pattern for 'externalising' patients. However, some important differences between this and the present study are apparent. Firstly, the role of the therapist in the Beutler *et al*. (1991) study was more restricted than in the present study, being limited to 'reflection of feelings, clarifications and information seeking…' (p.335). In the present study, therapists were more active in their role: they assessed each patient, explained the CBT model in the context of the patient's presenting problem, collaborated on the selection of suitable materials, and reinforced the patient's understanding and use of the workbooks and appropriate techniques. It is possible that, in this context, internal locus of control is less important to success since at least some of the onus is on the therapist. Although this is a possibility, it is worth reiterating that those patients who placed more emphasis on the role of the therapist tended to improve less, at least as far as stress symptoms were concerned.

The choice of locus of control measure in the present is worth mentioning here. Locus of control is not necessarily static across different domains; therefore an individual's perecived *health* locus of control could be very different to that perceived in other areas (e.g. occupational). To increase the specificity of the measure for the present study, it would have been ideal to use a locus of control measure which was particular to mental health. Unfortunately, the two such measures available were found to be

unsuitable: the Mental Health Locus of Control Scale (Hill & Bale, 1980) referred to psychiatric treatments and stereotypes that the current patient group (i.e. those with little or no experience of mental health settings) might have found off-putting, whilst the scale devised by Wood and Letak (1982) was both limited in scope and largely irrelevant to the context of guided self-help. As an alternative, the Multidimensional Health Locus of Control scale (MHLC; Wallston *et al*., 1978) was used, with the instructions adapted to direct the patient towards *mental*, rather than *general* health. While there is a precedent for adapting the instructions in this way (e.g. Hoffart & Martinsen, 1991) it was difficult to know the extent to which patients were adhering to these instructions rather than simply processing the wording of the individual items, which were left in their original form. There might be some doubt as to the purity of the present measure as a specific index of *mental health* locus of control.

The current findings, taken at face value, suggest that patients who see themselves as responsible for their own mental health stand to obtain no more benefit from a guided self-help programme than those who see their mental health as dependant on external factors. If it is indeed the case that most locus of control measures are irrelevant to most mental health improvement outcomes in guided self-help, then there would be little reason to exclude those with low internal locus of control from such an approach. This is especially important given that there may be a link between mental health problems and locus of control. If it is the case that those with a greater number of mental health symptoms tend to score higher on 'chance' and 'powerful others', and lower on 'internal' (e.g. Holder & Levi, 1988) then one might assume that a high proportion of those presenting for mental health treatment, even of the self-help variety, would reflect this profile. The present study suggests that, overall, guided self-help is a viable treatment option even for these patients who see health solutions outside of themselves.

Intellectual ability

Education, frequency and enjoyment of reading, and verbal IQ appeared to be unrelated to the extent of improvement in mental health symptoms after guided self-help. Despite the intuition amongst therapists that level of education and literacy could determine

patient success with written self-help resources (Keeley *et al*., 2002; Frude, 2004a) this pattern did not appear to exist in reality. The findings of the present study are in accord with those of Baillie and Rapee (2004) who also found that level of education and reading frequency were unrelated to self-help outcome. The present study used different questions to get a measure of patient reading habits, which respectively incorporated notions of both frequency and enjoyment of reading. These measures should be considered exploratory, since no validity or reliability data exist. Nonetheless, it might be argued that the current approach represents a marginally more detailed one than that of Baillie and Rapee (2004), in which they asked patients 'have you read a novel in the past month', the present findings are essentially the same. Of course, the possibility remains that those who have spent fewer years in education, dislike and avoid reading, and have lower verbal IQs are less likely to complete treatment (e.g. Scogin *et al*., 1989). This issue will be examined in a subsequent section.

The readability of self-help materials is being given increasing amounts of attention (e.g. Lewis *et al*., 2003; Scottish Executive, 2006). There was, however, no evidence from the present study that even those with relatively poor verbal or literacy skills were at a disadvantage when pursuing a guided self-help approach. Conceivably, this could be a strength of a facilitated over a 'pure' self-help treatment: patients who have trouble understanding the material presented in written form can develop a more advanced insight in conversation with a practitioner.

Verbal IQ was estimated solely on the basis of the NART. No significant relationship was found between verbal IQ and mental health outcome. However, a more robust estimate of verbal IQ should perhaps have been used. Crawford *et al*. (1989) advocate a method of generating IQ estimates based on both NART errors and certain demographic data (age, sex, education, occupation). The authors highlight the fact that an equation which incorporates the above demographic data might account for 78% of the variance in verbal IQ as measured on the Wechsler Adult Intelligence Scale, compared to one based on NART errors alone which might account for 72%. Given the ease with which demographic data could have been incorporated into the estimate of verbal IQ in the present study, it would have been worth considering. It is, though,

difficult to imagine that it would change the outcome given that the *r* value reflecting the correlation between verbal IQ and mental health improvements was so low.

With regard to the apparent lack of correlation between outcome and self-efficacy, locus of control and verbal IQ, an important general caveat is worth noting. It may have been that referrers were using implicit criteria in deciding which patients to direct to a guided self-help approach. Studies (e.g. Keeley *et al*., 2002) have shown that psychologists make assumptions about those patients who are likely to benefit from such an approach, with self-efficacy, internal locus of control and reading ability all being factors in the referral decision. If this were also the case with GPs and other mental health professionals who might refer to a guided self-help service, it is possible that a positively skewed distribution of self-efficacy, internal locus of control, intellectual ability and literacy would be observed in the referred population. It would be harder to find correlations between these variables and treatment outcome if the putative predictors fell within a very narrow range as a result of these potential implicit referral criteria.

Hypothesis 3: Relative to pre-treatment measures, GSES and MHLC-I will be increased, and MHLC-C and MHLC-PO decreased at post-treatment, one month and six months.

Among patients completing the guided self-help intervention, there was a significant increase in self-efficacy between pre- and post-treatment. Self-efficacy at one month and six months was also significantly higher than before treatment. Changes in the locus of control measures were more erratic. Internal locus of control saw an initial increase between pre- and post-treatment, but at one and six months was not significantly higher than at post-treatment. Chance locus of control decreased significantly compared to pre-treatment levels, but only at six months. Powerful Others locus of control saw a significant decrease at one month, but not at post-treatment or six months follow-up. Only the self-efficacy measure showed the predicted pattern of change reliably.

Although the locus of control measures each showed change in the expected direction, these changes did not appear to be robust over time.

These findings lend tentative support to the notion that guided self-help can promote self-efficacy and internal locus of control, whilst reducing chance and powerful others locus of control. With regard to self-efficacy, it has been suggested that all psychological therapies should aim to promote these beliefs (Bandura, 1977). Given the emphasis on the resources of the individual in self-help approaches (Richards, 2004), one might expect that such a treatment would increase one's perceived ability to bring about desirable changes in general. It is conceivable that the same pattern would be observed for locus of control: a treatment which emphasises significant personal responsibility for health outcome would be expected to reinforce beliefs of internal control and undermine beliefs in externally-determined health outcomes.

No robust changes in locus of control were noted when those completing the treatment were considered as a whole group. However, further exploratory analyses were performed on separate subgroups formed on the basis of symptomatic benefit with guided self-help. Patients differed widely in the extent to which their symptoms improved with the self-help method. It is difficult to imagine that those who made no progress (or whose symptoms got worse) would experience a large increase in self-efficacy. Bandura (1977) defined the construct as a 'conviction that one can successfully execute the behavior required to produce the [desired] outcomes' (p.193). The most important way in which such a conviction can be increased is through the successful attainment of the desired outcome (Rogers *et al*., 2002). If anything, it seems that a lack of success in any treatment which emphasises personal efficacy might *undermine* one's conviction that they can meet with success through their own efforts.

A similar pattern might be expected for locus of control. If a patient is unable to make progress with a treatment that places the responsibility on the individual, it is unlikely that this will strengthen their belief that their health outcomes are under their control. On the other hand, a patient who meets with therapeutic success as they embrace their personal responsibility might find that they place a greater focus on internal factors in the future.

In order to explore the above possibilities, the data set was arranged in order of total DASS21 improvement, and divided at the median point. Pre- and post-treatment scores were compared for 'better improvers' in isolation. For this subgroup, there was a significant pre- to post-treatment increase in self-efficacy, internal locus of control, and a significant reduction in chance locus of control. In the 'poorer improvement' group, there was a significant pre- to post-treatment increase in self-efficacy and chance locus of control.

These findings suggest that guided self-help *can* facilitate internal locus of control and self-efficacy, and decrease chance locus of control, but that this pattern tends only to be observed in those who make more substantial therapeutic improvements. In other words, those who find the self-help approach beneficial are likely to experience an increase in their perceived ability to bring about positive changes, and in the extent to which they see themselves as responsible for their own good health. Those who are less successful may still see an increase in self-efficacy, albeit smaller than that experienced by their more successful peers. They may also see an increase in their chance locus of control, potentially making them more likely to attribute the state of their health to external, uncontrollable factors in the future.

The mechanism behind these changes are open to debate. Bandura (1977) suggests that psychological interventions should target self-efficacy as well as the more obvious mental health symptoms. One possibility, therefore, is that self-efficacy and internal locus of control are directly increased, and chance locus of control directly decreased, by a successful guided self-help programme. According to this view, a guided self-help programme might be expected to impact the above variables regardless of whether or not mental health symptoms improved. This view would seem to contradict the present finding that two groups, defined by their extent of mental health improvement, had different profiles of change in self-efficacy and locus of control. It might be, however, that certain changes (e.g. increased internal locus of control) are dependent on a better mental health outcome, but not a direct result of it.

Another possible mechanism of self-efficacy and locus of control change would be *via* improvements in mental health. In other words, increases in self-efficacy and locus

of control may be mere artefacts of improved mental health symptoms. It is certainly the case that mental health measures are found to correlate with measures of both self-efficacy (Ehrenberg & Cox, 1991) and locus of control (Holder & Levi, 1988) but the precise reasons for the identified increases in the present study are difficult to elucidate.

Despite the above considerations, these findings are potentially important. Given the established association of good mental health with self-efficacy and internal locus of control, the possibility that guided self-help may promote these for a proportion of its users is advantageous. However, these changes might not occur for everybody to the same extent, particularly those who don't make as much therapeutic progress. There is also a possibility that unsuccessful guided self-help might strengthen beliefs about the personal uncontrollability of one's health. This notion is similar to a concern raised by Rosen (1987) with regard to self-help approaches in general.

One further point is a consideration of the *extent* of these changes. In terms of raw changes, most of the observed changes appear quite small. However, when effect sizes are calculated, the extent of increase in chance locus of control in the 'poorer outcome' group would be considered medium, whilst the increase in self-efficacy in the 'better improvement' group would be considered large (Cohen, 1992). This latter result is particularly striking, especially given that self-efficacy, under normal circumstances, is a relatively robust construct (Tipton & Worthington, 1984). What is perhaps less clear is whether or not such a change in self-efficacy would actively contribute to better mental health for that individual in the future.

Drop out

Of the 173 patients recruited, 156 had been discharged by the time of analysis. Of these 156, 59 (38%) had dropped out of the guided self-help treatment. Previous studies on self-help programmes have also reported high drop-out rates. Rosen (1987) cites a drop-out rate of 50% for self-administered desensitisation approaches for patients with a phobia. Marks *et al.* (2003) found that, of those attending a screening interview for computerised cognitive behaviour therapy, 20% refused the treatment, and 29% dropped out before the treatment was complete.

In the present study, completers and non-completers were found to differ in a number of respects. Non-completers tended to have higher initial scores on the depression and anxiety subscales of the DASS21, as well as the overall total. Non-completers also tended to have spent significantly less time in education, reported a significantly lower rating of reading enjoyment, and showed a non-significant trend towards having lower verbal IQ. It is possible that those with more severe symptoms perceived the guided self-help treatment as inadequate for them (Rogers *et al*., 2002). The finding that those who were less educated, enjoyed reading less and had lower verbal IQs were more likely to terminate treatment prematurely might be because they felt less comfortable with written materials and assignments.

Of those 156 participants discharged from the clinic, 37% were male, perhaps reflecting the slight gender bias in mental health referrals as has been noted elsewhere (e.g. Cavanagh *et al*., 2006). A slightly higher proportion (44%) of those who dropped out of treatment were male. Of all the males recruited, only 46% completed treatment, compared to 67% of females. It is not clear whether these are chance findings, or whether it is a pattern that might be replicated elsewhere. Taken at face value, it might imply that the guided self-help treatment is slightly more appealing to women than to men.

This speculation is based on the preconception that treatment dissatisfaction is the basis on which people decide to drop out. Under the procedure of the present study, patients who did not attend an appointment were sent a letter inviting them to arrange a further appointment within a prescribed period of time. If they did not make contact, no further efforts were made to pursue them, nor to find out why they had terminated the treatment prematurely. It might have been useful to have been more active in eliciting feedback from non-completers, in order to establish their views about the treatment and its suitability for them. Osgood-Hynes *et al*. (2002) telephoned patients who did not complete a 12-week computerised self-help program, and found that non-completion did not always imply that patients had not used the resources and found them useful. The majority had continued to use the computer system beyond the point at which they dropped out, and a significant proportion reported their reason for termination was that

they were feeling better. Marks *et al*. (2003) were able to contact 39 patients who dropped out of their computer-based self-help clinic, for whom the most popular reason for non-completion was practical difficulty in attending the clinic (13), followed by finding the approach unhelpful (10), low motivation (8), preferring face-to-face treatment (8), obtaining help elsewhere (2) and resolution of the problem (2). In the present study, it is difficult to know which (if any) of these factors was most influential to the drop-out rate.

Because a significant proportion of patients did not complete the treatment, 'intent-to-treat' analyses were performed in order to see whether guided self-help was effective for the sample as a whole, even when making the conservative assumption that those who dropped out did not improve at all. While the findings of these analyses were promising, they were only performed on pre- and post-treatment data. At one and six months, even given the obvious time lag in being able to collect data, response rates were quite low. It seemed to be an unfair advantage to the treatment to 'carry over' the most recent response of patients who had not yet returned follow-up measures, given that there were significant improvements immediately post-treatment. Similarly, it seemed to unfairly disadvantage the treatment to replace the missing follow-up data with pre-treatment scores. Analyses of follow-up measures, therefore, were based on quite small samples, and it is possible that they reflect bias. It may be, for example, that those patients with a positive view of the treatment are more likely to return the measures six months later than those who were indifferent to it.

General strengths

This study provides a potentially useful evaluation of a different model of guided self-help. Studies which have sought to evaluate self-help approaches in the past have been based on widely varying treatment models, and it is perhaps risky to assume that they are all equivalent. The treatment in question in the present study involved only two hours of clinician contact, over a period of around one month. As such, it is much shorter than many previously-evaluated self-help methods, which may be an advantage from the point of view of both patients and mental healthcare services, especially given

that there is reason to suggest that the treatment is effective. The present study might provide justification for self-help interventions which are limited in scope yet easily and quickly accessible.

A further advantage of this over previous studies of self-help is the substantial follow-up period of six months. While the response rate was inevitably low by this point, it was encouraging that mental health symptom scores remained significantly improved over those collected at pre-treatment. With some significant exceptions (e.g. White, 1998), most studies have not included an assessment of symptoms after a significant period of time (Gould & Clum, 1993). In the present study, data collected at six months follow-up were consistent (on average) with maintained mental health gains. Although the volume of data was limited at this stage of collection, the finding lends further support for guided self-help as a treatment option.

A few studies (e.g. Mahalik & Kivlighan, 1988) have sought to ascertain those factors which might predict success with guided self-help. Whilst the present study identified few, if any such factors, this in itself could be an important finding with this particular treatment model. In general, the findings echo those of previous studies which have focussed on different methods of self-help delivery, and go some way to suggest that the model in the present study is a viable option for a wide range of patients.

The present study has an advantage over previous studies when looking at items that might be related to extent of improvement, given the relatively large sample employed. Other authors have looked for predictors of success in self-help amongst quite small samples (e.g. Osgood-Hynes *et al*., 1998; Mahalik & Kivlighan, 1988), with the implication that only those associations of larger effect are likely to be identified. Given the larger number in the present study, it was possible to examine hypotheses about more subtle effects, few of which were found. One advantage of having this size of sample is that it is less likely that clinically relevant associations were overlooked due to a lack of statistical power. Any undiscovered associations would be smaller than medium-sized (Cohen, 1992) and would be unlikely to lead to any clinically-relevant conclusions.

A unique feature of the present study was the incorporation of a verbal IQ measure as a putative predictor of self-help success. Other studies (e.g. Baillie & Rapee, 2004) have made some attempt to examine the role of literacy in facilitating self-help, but have done so on a rather more informal basis. As well as replicating the finding that general reading habits and education shed little light on a self-help user's prognosis, the present findings suggest that an estimate of verbal IQ (based on vocabulary) is unrelated to self-help outcome, at least for the clinic and materials under examination. Informal questions about an individual's frequency and enjoyment of reading are unlikely to be a perfect index of literacy or intelligence, whereas the additional estimate of verbal IQ employed in the present study appears to tap more precisely into verbal intellect (Crawford *et al*., 1989).

There are several possible aspects of outcome that one might reasonably assess in the context of a mental health intervention. Most studies seeking to identify areas of change with self-help treatments focus (understandably) on mental health symptoms. Some have also attempted to gather more qualitative measures of patient satisfaction with such a treatment (e.g. Marks *et al*., 2003; Osgood-Hynes *et al*., 1998). A few have tried to look at financial outcomes in order to see whether self-help is a viable alternative to more conventional, resource-intensive therapies (e.g. Gega *et al*., 2004). Another useful measure, particularly from a service point of view, is the future consumption of mental health services by a person having undertaken a self-help approach (White, 1998). The present study focussed on a range of emotional symptoms that wasn't restricted to one diagnostic category (e.g. depression). In addition, measures of belief constructs were incorporated, that might be relevant to a person's longer-term approach to their health. In particular, whilst other studies have looked at self-efficacy and locus of control as *predictors* of success in self-help, the present study also examined whether these variables in themselves might be affected by self-help treatments. Given the potential benefits to health of fostering self-efficacy and internal locus of control, the finding that these can be increased in those who have a successful experience of self-help (as defined by mental health measures) is an encouraging finding.

General limitations

An important theoretical limitation in the present study is the possible interdependence of certain experimental hypotheses. As an example, there is potential for confounding influence of hypothesis 2 on hypothesis 3, and vice versa. Hypothesis 2 predicted a correlation between certain pre-treatment measures (e.g. self-efficacy) and changes in mental health symptoms, while hypothesis 3 predicted pre- to post-treatment changes in the *same* measures. Hypothesis 2 predicted that patients with high pre-treatment self-efficacy tended to see greater mental health improvement. However, those with high pre-treatment self-efficacy scores would be less likely to show pre- to post-treatment increases in self-efficacy, due to the statistical artefact of regression to the mean. Therefore, rejecting the null hypothesis with regard to hypothesis 2 would arguably make it less likely that the null hypothesis could be rejected for hypothesis 3. As things stand with the present study, the outcome of one hypothesis could potentially exert an influence on the outcome of the others, which is far from ideal.

A further important limitation in the present study is the lack of a control group. Data could only be collected over a limited period of time, and given that a substantial 'treatment' sample was needed in order to achieve appropriate statistical power, it would not have been feasible to recruit a control group from the same clinical population. It would also have been more difficult, from an ethical point of view, to justify witholding a potentially useful treatment from distressed individuals. The lack of a control group is a problem that blights many previous studies of self-help treatments (Cuijpers, 1997) and is one that should be taken into account as findings are interpreted. The most obvious implication of the uncontrolled nature of the present study is that it is difficult to be certain about the cause(s) of the observed changes in both mental health symptoms and belief measures.

Certain other studies have been able to include control groups, but the findings can still be open to interpretation. As an example, Salkovskis *et al*. (2006) randomly allocated depressed patients to a self-help treatment or a 'treatment as usual' control group. This study, and others like it, illustrate some of the difficulties inherent in the 'randomised controlled trial' approach to psychological therapies. Firstly, there is little

control over what 'treatment as usual' involves. In the Salkovskis *et al*. (2006) study, patients in the 'treatment as usual' were managed in primary care, with one aspect of this management being the prescription of medication for some patients. In essence, the researchers were only able to gauge whether self-help booklets were of any use *in addition* to other treatments, rather than whether they were useful as a stand-alone option compared to no treatment at all. Secondly, this study shares a common limitation in psychological therapy research, namely that it is impossible for patients to be blind to their experimental group. The 'treatment as usual' group will be aware that they are not receiving self-help materials to supplement their management in primary care, and it is possible to see how this knowledge might influence the responses they give when their symptoms are measured.

Whilst the present study had no control group at all, some thought was given as to how some competing explanations for patient recovery might be evaluated. In particular, separate analyses were performed on the subgroup who were not in receipt of medication during the course of their treatment, which revealed a similar pattern of improvement as was seen for those on medication. Although those in the medication group made greater gains on the DASS21 depression subscale pre- to post-treatment, this was not the case for the anxiety and stress constructs. On the face of it, this would seem to suggest that mental health improvement does not depend solely on medication, and that patients who are medication-free are also liable to improve over the course of a guided self-help treatment (regardless of whether the guided self-help treatment is the specific *cause* of the improvement).

The use of medication as a variable in the present analysis was on a largely post-hoc basis, and as such it is necessary to explain what is meant by a patient's inclusion in the 'medication' group. At the point of referral, referrers indicated whether or not a patient was currently taking psychotropic medication. Given the number of participants required for the present analyses, it was not possible to control for type of medication, dose, or stability of medication regime. Other studies of psychological interventions have been able to control for these factors more rigorously. Kenardy *et al*. (2003), for example, included only those patients who had been on the same medication regime (or

had been medication-free) for three months prior to commencing treatment, and were removed from the study if their medication changed at any point during the three months of experimental treatment. Given that a large proportion of patients were in the early stages of a medication regime at the point of initial assessment, and that some of these patients had their medication altered during the course of the self-help treatment, 'medication' should be considered a rather crude grouping variable in the present study.

Medication is only one potential source of improvement for those with mental health problems. Another important possibility in the context of the present study is that of spontaneous recovery. After all, the present findings are not inconsistent with the idea that patients would generally get better on their own without the need for any intervention at all. The notion of spontaneous recovery might be particularly important for the present study, whose focus was a clinic catering for those with only mild mental health problems. It seems unlikely that people with a chronic history of complex and severe mental health difficulties would often get better if simply left to their own devices, but it seems more conceivable that those with milder, more circumscribed problems of more recent onset might find their symptoms easing with the passage of time. Given that most of the patients in the present study fell into the latter category, spontaneous recovery is a concern that should be taken seriously. There appears to have been very little recent work in the area of spontaneous recovery, perhaps because there is now much less of a tendency to leave mental health problems untreated for any significant length of time. In one study, Subotnik (1975) performed a longitudinal analysis of patients from a GP practice who scored above the clinical cut-off on a measure of emotional distress. 59 respondents were categorised on the basis of the length of time which had elapsed since they completed the questionnaire (up to four years in the case of nine patients). None of the patients had received any treatment for a mental health problem in this intervening period, but no significant effect of time on mental health symptoms was noted. While the findings of Subotnik (1975) seem to cast doubt on the occurrence of spontaneous recovery, they appear to be at odds with what is often reported anecdotally, particularly for the affective disorders (e.g. Turns, 1978).

The lack of a true control group makes it quite difficult to eliminate the potentially confounding effects of a range of factors, which may not be limited to medication and the passage of time. A further difficulty, common to many analyses of psychological therapies, is the issue of blindness. When medicative treatments are evaluated, it is standard practice for the process to be 'double-blind', in order that neither the patient not the researcher knows whether the patient is in receipt of the active treatment or a placebo. When studies are controlled in this way, it becomes possible to distinguish between the effects of active treatment, and those that are attributable only to a patient's belief that they are receiving such a treatment (the 'placebo effect'). Unfortunately, it is much more difficult to 'disguise' psychological treatments in order that patients do not know whether they are receiving it or not. More often, efficacy trials of psychological therapy are the equivalent of 'open label' evaluations of medication. In the case of the present study, for example, patients had a precise knowledge of the treatment they were going to receive, at the point of referral. It is likely that most of those agreeing to pursue this treatment did so because they expected that it might help them. The possibility arises, therefore, that an uncertain proportion of the observed improvement in mental health symptoms was a placebo effect, occurring only because patients *believed* they were receiving an active treatment, regardless of the actual form or content of the treatment itself. Obviously, that patients did generally improve is a positive outcome, but it may be that the approach used had little to do with this.

While patient expectancies about the effectiveness of treatment can influence the outcome of that treatment (e.g. Osgood-Hynes *et al*., 1998), patients might also make assumptions about the expectancies of the researchers when completing questionnaire measures. In the present study, patients completed post-treatment measures in the presence of a member of clinical staff, at the end of their final appointment. Given this scenario, it is possible that patients might underplay their symptoms, perhaps in order to show that they had 'engaged with the treatment properly', or to avoid appearing resistant or ungrateful. Some effort was made to negate this possibility, in that pre-treatment questionnaires were not reviewed at any time during the treatment, until the post-treatment measures were completed. In other words, it is unlikely that patients would

remember the responses they made before treatment began in order for these to bias post-treatment responses. Nonetheless, it is difficult to get around the fact that patients knew they were being treated in a way that clinicians thought would be effective for them.

Having looked at confounding factors that might influence how a patient responds after having received treatment, brief note should also be given to pre-treatment response tendencies. Given that the patient group in question were those with mild mental health problems, it is likely that a proportion of them would be uncertain as to whether they were entitled to consume mental health services. It is a speculative possibility, therefore, that patients tended to 'play up' their symptoms prior to entering treatment in order to convince the clinician of the validity of their complaint. This might artificially inflate the apparent extent of improvement in symptoms over the course of the treatment, and is a difficult possibility to eliminate.

The outcome measures used in the present study (mental health symptoms, self-efficacy and health locus of control) were fairly limited in scope, even though the inclusion of belief measures was fairly unique. As such, the bases on which the effectiveness of the treatment is being gauged are quite narrow. As mentioned above, other studies of self-help approaches have included subjective satisfaction measures (e.g. Marks *et al*., 2003), cost comparisons (Gega *et al*., 2004) and future service consumption (White, 1998). Given the tentative support provided by the present study that this model of guided self-help can reduce mental health symptoms, it would have been useful to know more about its acceptability to patients, and its financial viability from a service point of view.

Implications

Although the above caveats should temper an overly positive interpretation of the present findings, it is encouraging that the findings are at least consistent with the idea that guided self-help can significantly reduce symptoms of depression, anxiety and stress, as has been found with other models of self-help (e.g. Scogin *et al*., 1990). Significant improvements in mental health symptoms appeared to be maintained at one

and six months follow-up, which would seem to suggest that treatment gains in guided self-help are durable. There was no evidence that particular patient groups are at any significant advantage or disadvantage with this approach, but there was some suggestion that those who make more substantial improvements are also liable to see increases in their sense of self-efficacy and in their internal locus of control, and decreases in their chance locus of control. If such changes were indeed attributable to the guided self-help treatment, this would have very positive implications, since these constructs are so closely related to good mental health (Ehrenberg & Cox, 1991; Holder & Levi, 1988). It would also show that guided self-help is a treatment closely aligned with the current climate of patient empowerment (Richards, 2004) and the shift away from paternalistic models of healthcare (Charles *et al*., 1999).

For those completing the treatment, even without the benefits of medication, guided self-help was associated with a similar extent of overall mental health improvement (ES = 0.86) as has been identified in meta-analyses of both self-help (e.g. Cuijpers, 1997) and cognitive therapy (e.g. Gloaguen *et al*., 1998). This is a reassuring finding, especially for those who might see self-help as a 'watered down' option with which patients can be 'fobbed off' (Floyd, 2001). It might even be argued that there is no *requirement* for self-help to be as effective as conventional therapeutic methods in order for it to be advocated: since self-help methods are available and accessible to more people, even modest individual benefits might amount to greater *total* benefit in a whole population than full-length CBT, which is only ever going to be available to a relative handful. It is interesting to note that self-help seems to *exceed* the level of effectiveness required to ensure its consideration as a viable treatment option.

The present findings are at least consistent with the idea that guided self-help can be as effective as conventional face-to-face therapy for those with mild-to-moderate mood disorders. If it were reliably established that guided self-help and face-to-face therapy were comparably effective, it could be offered to patients without any sense that they were being given something 'second rate'. Indeed, if they thought it was generally as effective as other options, patients might actively choose this treatment. It is an inexpensive (or free) treatment, which they could access more quickly than longer-term

therapy. It might also allow them to feel more empowered as they access their own resources to tackle the problem, avoiding the situation of feeling dependent on a therapist.

Health services might also gain from a more widespread use of self-help approaches. In particular, self-help methods consume less professional time, which means that patient throughput can be quicker, and that waiting times are kept short. Additionally, self-help approaches do not require the skills of a highly trained therapist to deliver them, meaning that such staff can be moved to supervisory roles as their more junior colleagues deliver the interventions. Self-help seems to be a potentially promising component of the current NHS agenda to increase access to psychological services (Layard, 2005).

Further research

A number of important areas for future research are suggested by the findings of the present study. Firstly, more attempt should be made produce replicable efficacy studies of self-help which incorporate a true control group. Specifically, it would be extremely useful to know how a guided self-help approach might compare to no treatment at all, rather than simply 'treatment as usual'. Given the drive for greater patient choice in mental healthcare (Layard, 2005) there may be patients who opt *only* for a guided self-help approach, and it would be important to have an idea of the effectiveness of such a treatment in isolation. Naturally, this sort of approach would need a more careful ethical justifcation, since it would involve witholding treatment from certain individuals for a period of time. On the other hand, such a design would more easily allow the true effect of such a treatment to be identified.

One possible alternative to a study of this type would be a design in which all patients receive self-help treatment after a certain delay. Symptom measures could be gathered at the point of referral, before the patient is placed on a waiting list for a month. After a month, symptom measures would be repeated prior to commencing treatment, and again post-treatment (about one month later). Follow-up measures could then be collected at the desired follow-up intervals. In order to see whether guided self-help

treatment was effective relative to no treatment, improvements between referral and pre-treatment could be compared to improvements between pre- and post-treatment. If the latter were significantly greater than the former, it would go some way to suggesting that the benefits of guided self-help were greater than any gains which might occur without it. This design is perhaps ethically superior to the 'pure'control group scenario above, although the deliberate witholding of treatment for a month would still need to be justified.

As researchers try to answer broader questions about the viability of self-help within healthcare settings, it is important that studies seek to incorporate more varied indices of success. While it is important to measure mental health symptoms, research might also incorporate measures of patient satisfaction, functional status, cost-per-patient, future prescription of psychotropic medication or use of mental health services. Such factors, in combination, could provide a more a more holistic account of 'success' in guided self-help, and allow services to target resources appropriately.

Further thought might also be given to the way in which self-help is delivered. Self-help materials are currently available in a wide range of media, including printed materials, computer software, audio recordings and video (Marrs, 1995). The internet is a further way in which self-help resources might be made available to a wider audience (Prasad & Owens, 2001). It would be useful to gauge patient preference with regard to the format of any self-help materials they are offered, in order to make them as attractive to the client group as possible.

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Appendix 1

GP Referral Form

Department of Clinical Psychology

Referral to **Guided Self-Help Clinic**, Leith Community Treatment Centre

Referrer Details	Patient Details
Name: Practice: Date of Referral:	Name: Date of Birth: Address: Telephone:

Patients can often be seen more quickly if appointments are arranged by telephone. If the patient is unavailable, is it acceptable to leave a message? Yes No

Nature of Problem				
Please tick:	□ Stress	□ Mild Anxiety	□ Mild Depression	□ Insomnia
Comments:				

Screening Questions		
Is the patient…	**Yes**	**No**
Interested in self help approach?		
Reporting recent suicidal ideation or self-harm?		
Currently misusing drugs or alcohol?		
Visually or intellectually impaired?		
Able to concentrate on a self-help approach?		
Has the patient…		
Previously or currently been referred to psychiatry?		
Had more than one course of psychological therapy?		

(If all ticks are in non-shaded boxes, consider the guided self-help option)

Medication			
	Yes	**No**	Details
Is the patient already on psychotropic medication?			
Was medication prescribed on this visit?			

If the guided self-help approach was not available, I would have…	
□ Seen the patient more myself	□ Prescribed medication
□ Referred them to mental health services	□ None of these
□ Referred them to voluntary services	

Please send referrals directly to: **Guided Self-Help Clinic, Leith Community Treatment Centre**

Appendix 2

Pre-Treatment Assessment Pack

DASS21

Name: *Date:*

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:
0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1	I found it hard to wind down	0 1 2 3
2	I was aware of dryness of my mouth	0 1 2 3
3	I couldn't seem to experience any positive feeling at all	0 1 2 3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0 1 2 3
5	I found it difficult to work up the initiative to do things	0 1 2 3
6	I tended to over-react to situations	0 1 2 3
7	I experienced trembling (eg, in the hands)	0 1 2 3
8	I felt that I was using a lot of nervous energy	0 1 2 3
9	I was worried about situations in which I might panic and make a fool of myself	0 1 2 3
10	I felt that I had nothing to look forward to	0 1 2 3
11	I found myself getting agitated	0 1 2 3
12	I found it difficult to relax	0 1 2 3
13	I felt down-hearted and blue	0 1 2 3
14	I was intolerant of anything that kept me from getting on with what I was doing	0 1 2 3
15	I felt I was close to panic	0 1 2 3
16	I was unable to become enthusiastic about anything	0 1 2 3
17	I felt I wasn't worth much as a person	0 1 2 3
18	I felt that I was rather touchy	0 1 2 3
19	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0 1 2 3
20	I felt scared without any good reason	0 1 2 3
21	I felt that life was meaningless	0 1 2 3

Department of Clinical Psychology

Study title: *Who benefits most from guided self-help?*

Invitation
There is a research study taking place in the guided self-help clinic, and you are invited to take part in it if you wish. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the purpose of the study?
There have been many studies suggesting that self-help is a useful treatment for a range of problems. However, few studies have looked at the sorts of people who benefit *most* from self-help. Our study (which will run until August 2007) will see if any of the following factors affect how much benefit people get from self-help:

- Confidence in their own ability to solve problems and make changes
- A sense of personal responsibility for their own mental health
- Reading ability

Why have I been chosen?
We are asking everyone who is referred to the guided self-help clinic to take part in this study. We are hoping to include 85 people.

Do I have to take part?
You are under no obligation to take part. If you do decide to take part, you will be given this information sheet to keep, and will be asked to sign a consent form. However, you are still free to withdraw from the study at any time without having to give a reason. If you decide not to take part in the study, this will not affect the treatment you will receive in the clinic.

What will happen to me if I take part?
If you do decide to take part, you will be asked to complete two extra questionnaires in addition to the **Depression Anxiety and Stress Scale (DASS)** you have already filled in. These are the **Multidimensional Health Locus of Control** and the **General Self-Efficacy Scale**. There are also three additional questions about your level of education, and your reading habits. You will be asked to complete these questionnaires again during your final appointment. Copies will also be sent to you in the post one month and six months after your final appointment. You will receive a stamped, addressed envelope on both occasions, in order to send the questionnaires back. In addition, you will be asked to read a short list of words at the end of your first appointment. This will help us to have an idea of how easily you will be able to work through the written self-help materials.

What are the alternatives for diagnosis or treatment?
Self-help has been shown to be a useful treatment for a number of problems, including stress, depression, anxiety and insomnia. Other treatments, such as medication and 'talking' treatments can also produce benefits. Please ask your GP if you are interested in other possible treatment options.

What are the possible disadvantages and risks of taking part?
Apart from the time it will take to fill in the two extra questionnaires, there are no other disadvantages or risks in taking part.

What are the possible benefits of taking part?
Taking part in this research will not make any difference to the treatment you receive, or how much benefit you obtain from it. However, the information we get will hopefully be useful in helping us to treat others with similar problems in the future.

What if something goes wrong?
If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated during the course of this study, the normal National Health Service complaints mechanisms should be available to you.

Will my taking part in this study be kept confidential?
Any information collected will be stored securely, and will remain confidential. Only the two individuals involved in the running of the guided self-help clinic will be allowed access to such information. When the study is presented or published, all identifying information will be removed so that no individuals can be identified.

What will happen to the results of the research study?
Once this study ends in August 2007, it is hoped that our findings will be published in an academic journal. You may also request a summary of the results by contacting the lead researcher.

Who is organising and funding the research?
This study represents an obligatory component of a doctorate degree in clinical psychology, at the university of Edinburgh.

Who has reviewed the study?
This research has been approved by the Lothian Research Ethics Committee.

Contact for further information
If you wish to discuss any aspect of this research, please contact Douglas Hutchison, Trainee Clinical Psychologist, on 0131 537 6905. Alternatively, please feel free to talk to your guided self-help practitioner when you come for your first appointment.

Many thanks for taking the time to read this information sheet.

Douglas Hutchison
Trainee Clinical Psychologist
Lead Researcher

Version 3.0
16/03/06

Department of Clinical Psychology

Consent form

Who benefits most from guided self-help?

Lead Researcher: Douglas Hutchison, Trainee Clinical Psychologist

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	Please tick
I confirm I have read and understood the attached information sheet	☐
I understand that my participation is voluntary and that I can withdraw at any time, without having to give a reason, without my treatment or legal rights being affected	☐
I agree to take part in this study	☐

Signed _____ (patient signature) Print Name _____ (patient name) Date _____

Signed _____ (researcher signature) Print Name _____ (researcher name) Date _____

Version 3.0
16/03/06

Multidimensional Health Locus of Control

Below are a list of statements which could apply to your beliefs about **mental health**. Please read each statement, and decide how well it describes your beliefs about **mental health** and **mental illness**, and circle the most appropriate response. Please make sure you answer every item, and that you only circle one response per item. As these statements are about individual beliefs, there are no right or wrong answers.

Strongly Disagree **(SD)**	Slightly Agree **(A)**
Moderately Disagree **(MD)**	Moderately Agree **(MA)**
Slightly Disagree **(D)**	Strongly Agree **(SA)**

1	If I get sick, it is my own behaviour which determines how soon I get well again.	SD MD D A MA SA
2	No matter what I do, if I am going to get sick, I will get sick.	SD MD D A MA SA
3	Having regular contact with my physician is the best way for me to avoid illness.	SD MD D A MA SA
4	Most things that affect my health happen to me by accident.	SD MD D A MA SA
5	Whenever I don't feel well, I should consult a medically trained professional.	SD MD D A MA SA
6	I am in control of my health.	SD MD D A MA SA
7	My family has a lot to do with my becoming sick or staying healthy.	SD MD D A MA SA
8	When I get sick, I am to blame.	SD MD D A MA SA
9	Luck plays a big part in determining how soon I will recover from an illness.	SD MD D A MA SA
10	Health professionals control my health.	SD MD D A MA SA
11	My good health is largely a matter of good fortune.	SD MD D A MA SA
12	The main thing which affects my health is what I myself do.	SD MD D A MA SA
13	If I take care of myself, I can avoid illness.	SD MD D A MA SA
14	Whenever I recover from an illness, it's usually because other people (for example, doctors, nurses, family, friends) have been taking good care of me.	SD MD D A MA SA
15	No matter what I do, I 'm likely to get sick.	SD MD D A MA SA
16	If it's meant to be, I will stay healthy.	SD MD D A MA SA
17	If I take the right actions, I can stay healthy.	SD MD D A MA SA
18	Regarding my health, I can only do what my doctor tells me to do.	SD MD D A MA SA

Generalised Self-Efficacy Scale

For each of the following statements, please indicate the extent to which you think it is true of you. Please circle one number for every statement. As these statements are all beliefs you might or might not hold about yourself, there are no right or wrong answers.

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

1	I can always manage to solve difficult problems if I try hard enough.	1 2 3 4
2	If someone opposes me, I can find the means and ways to get what I want.	1 2 3 4
3	It is easy for me to stick to my aims and accomplish my goals.	1 2 3 4
4	I am confident that I could deal efficiently with unexpected events.	1 2 3 4
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1 2 3 4
6	I can solve most problems if I invest the necessary effort.	1 2 3 4
7	I can remain calm when facing difficulties because I can rely on my coping abilities.	1 2 3 4
8	When I am confronted with a problem, I can usually find several solutions.	1 2 3 4
9	If I am in trouble, I can usually think of a solution.	1 2 3 4
10	I can usually handle whatever comes my way.	1 2 3 4

How many years have you spent in education? _____

How much do you enjoy reading? (please circle)

Not at all					Very much
1	2	3	4	5	6

How often do you read? (please circle)

Never					At every opportunity
1	2	3	4	5	6