

Evidence scan:

Training professionals in motivational interviewing

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Health Foundation evidence scans provide information to help those involved in improving the quality of healthcare understand what research is available on particular topics.

Evidence scans provide a rapid collation of empirical research about a topic relevant to the Health Foundation's work. Although all of the evidence is sourced and compiled systematically, they are not systematic reviews. They do not seek to summarise theoretical literature or to explore in any depth the concepts covered by the scan or those arising from it.

This evidence scan was prepared by The Evidence Centre on behalf of the Health Foundation.

Key messages

Motivational interviewing is a popular method for supporting patient activation. This research scan summarises what is known about how best to train professionals to use this technique.

Motivational interviewing draws on people's intrinsic motivation to change their behaviour and improve their health. The skills of the professionals offering motivational interviewing may influence its success. This research scan compiles studies about how to help professionals develop motivational interviewing skills. We searched ten electronic databases for research available as of September 2011 and included 143 studies.

Characteristics of training

Research suggests that it is possible to train professionals and lay people to offer motivational interviewing. The two most common training strategies are embedding an introduction to motivational interviewing skills into the core preregistration curriculum and offering one to two day continuing professional development courses.

The characteristics of effective training include:

- a focus on the underlying philosophy and principles of motivational interviewing
- adequate duration to allow embedding of skills
- opportunities to practice skills through simulation and role play
- opportunities for ongoing feedback and supervision.

There is relatively little research contrasting different training techniques.

Characteristics of trainers

Although a number of studies have examined a variety of different ways to train motivational interviewers, none of these studies focus on the characteristics of trainers themselves. Research about medical educators more generally suggests that respect, active listening and empathy, communication skills and constructive challenging and feedback are all essential, but the extent to which these characteristics are also important for motivational interviewing trainers remains uncertain.

Characteristics of interviewers

Little research is available about the characteristics of 'good' motivational interviewers. Some studies suggest empathy and listening skills as core features, as well as being a good role model in terms of healthy behaviours. However there is no evidence about whether some types of professionals are more effective at motivational interviewing than others and no evidence about whether age, gender, ethnicity, education level or other demographic factors influence the effectiveness of motivational interviewers or predict who can most successfully use this technique. Aptitude for and appreciation of behaviour change approaches may be more important than demographic characteristics.

1. Scope

Motivational interviewing is a tool for helping patients feel engaged and in control of their health and care. The success of this technique may depend in part on the skills and characteristics of the professionals offering motivational interviewing.

1.1 Purpose

The Health Foundation wants to help develop a health service that enables everyone to play an active role in their own health and healthcare. To achieve this, patients need choice, involvement, dignity and respect. We are therefore championing the embedding of self management support and shared decision making into routine care. Motivational interviewing may be one way to help patients retain control and choice regarding their health and to support patients' self management.

This research scan examines the most effective ways to train professionals to offer motivational interviewing and the characteristics of effective motivational interviewers.

The scan does not summarise literature about whether motivational interviewing is effective or the circumstances under which it may work best in any depth. Instead, the focus is on the characteristics of training and of professionals themselves that may influence the success of this approach.

The research scan addresses the questions:

What are the characteristics of good training for motivational interviewing?

What are the characteristics of good motivational interviewers?

This scan focuses on empirical research. It does not include theoretical articles or descriptive narratives.

All of the evidence has been sourced and compiled systematically, but the scan is not a systematic review and does not seek to summarise every study on this topic. Instead, the purpose is to provide a rapid overview of readily available information.

1.2 Motivational interviewing

Motivational interviewing is an approach that aims to engage people's intrinsic motivation to change their behaviour. It is a semi directive technique that uses questions and support to help people set their own goals, see discrepancies between where they are and where they would like to be and develop strategies to move forward.

Motivational interviewing is more of an interpersonal style than a distinct 'technique.' The approach has a guiding philosophy focused on what triggers change. The techniques used may include seeking to understand a person's frame of reference through reflective listening, expressing acceptance, recognising the patient's degree of readiness to change, eliciting and reinforcing the patient's own self motivational statements and affirming the patient's freedom of choice and self direction.¹

The term 'motivational interviewing' was first coined by US psychologist Professor William Miller in 1983 and evolved from his experiences supporting problem drinkers.² In the early 1990s, the fundamental concepts of motivational interviewing were elaborated by Miller and another psychologist, Professor Stephen Rollnick.³⁻⁶

From the 1990s onwards, this method gained momentum. It was initially used as a counselling approach to support people to reduce their use of alcohol, tobacco or drugs. However, it has since been applied to a wide range of behaviour change, including weight loss, exercise, managing long term conditions, pain management, anxiety and depression and other issues where behaviour change and self confidence is desired.

The term 'motivational interviewing' is usually associated with the healthcare sector, although broader coaching approaches have been used in human resources, management and leadership development. Motivational interviewing has also been applied to a limited extent in the education and criminal justice sectors.

A range of other interventions have similarities to motivational interviewing such as motivational enhancement theory (a time-limited four session approach) and health coaching.⁷ Motivational interviewing techniques are also widely applied as part of telephone care management initiatives, some forms of counselling and some types of self management education.

There is no universally accepted definition of motivational interviewing. Published studies differ somewhat in the interventions labelled with this term. There are variations in the delivery mechanism used (face-to-face, telephone or online), the duration (from a one-off half hour long session to repeated sessions over several months or years), to the structure and type of content covered.⁸

However, most motivational interviewing interventions have some common principles. These focus on the underlying spirit of motivational interviewing, rather than specific tools and techniques (see Box 1).

Numerous studies have been published about the potential effects of motivational interviewing on self efficacy and behaviour change in adults and young people. Motivational interviewing is generally well regarded by patients, 10,11 but there are mixed findings about its effectiveness. Some studies report tangible changes in self confidence, 12,13 self management, 14 physical activity, 15 smoking cessation, 16 substance use, 17-19 adherence to medication or care, 20,21 weight loss, 22-24 and other healthy behaviours 25 and service use, 26 even after relatively short or concise interventions.

Other studies have found that motivational interviewing has little or no effect on behaviours or clinical outcomes^{27–35} or that other interventions, such as structured education and advice or tailored information, are just as effective or more effective.^{36–41} The most positive studies tend to involve a longer period or 'higher dose' of motivational interviewing^{42–44} and use the technique as one component of a broader support package.^{45–49}

However these factors alone may not explain why some studies find benefits and others find limited effects. The characteristics of the professional providing motivational interviewing and how they are trained may be an important factor in whether this approach works well.⁵⁰ Therefore this research scan examines what has been published about the characteristics of effective motivational interviewers and how motivational interviewers can best be trained to provide supportive care.

Box 1: Principles of motivational interviewing^{51–53}

- Recognising that people making changes in their lives have different levels of readiness to change their behaviour (the 'stage of change').⁵⁴ Some may have never thought about changing the behaviour in question, some may have thought about it but not taken steps to change it and others may be actively trying to change their behaviour and been trying unsuccessfully for years. Motivational interviewers 'roll with resistance' in that they accept that reluctance to change is natural.
- Taking a non judgmental, non confrontational and non adversarial approach. Motivational interviewing aims to increase a person's awareness of the potential consequences and risks faced as a result of their behaviour and to help people see a better future and become increasingly motivated to achieve it. The focus is on supporting people to think differently about their behaviour.
- Motivation to change is elicited from the patient rather than imposed externally. Motivational interviewing relies on identifying and mobilising the patient's intrinsic values and goals in order to support behaviour change.
- Being semi directive. The motivational interviewer attempts to influence people to consider making changes, rather than loosely exploring themselves and their feelings. However there is no coercion or direct persuasion.
- Expressing empathy and understanding of the patient's perspective.
- Developing discrepancy whereby the motivational interviewer helps people see the difference between how they want their lives to be and how they currently are or between their values and their day to day behaviours. It is the patient's responsibility to articulate and consider solutions to any discrepancies or ambivalence.
- Supporting self efficacy. Motivational interviewers encourage people to take responsibility for their actions and help them build confidence in their ability to change. Often motivational interviewers look for 'commitment language' from patients to illustrate that they are becoming more ready to make changes.

1.3 Methods

To collate evidence, one reviewer searched bibliographic databases, reference lists of identified articles and the websites of relevant agencies.

The databases included MEDLINE, Web of Science, Embase, the Cochrane Library and Controlled Trials Register, PsychLit, ERIC, Google Scholar, DARE, the WHO library and the Health Management Information Consortium. All databases were searched from inception until 30 September 2011.

Although the focus of this research scan is on motivational interviewing, to account for variations in terminology, studies which did not explicitly use this term were eligible if the intervention contained the principles outlined in Box 1.

Search terms included combinations of words and similes such as motivational interviewing, health coaching, motivational techniques, motivational enhancement, behaviour change counselling, coping skills, appreciative inquiry, strength based interviewing, questioning, counsellor, motivational interviewer, educator, trainer, active listening, training, teaching, education, learning, skills, skill acquisition, provider, supervision, professionals, curriculum, competence, communication style, lifestyle improvement, characteristics, demographics, traits, attributes, confidence, stage of change and transtheoretical model.

To be eligible for inclusion, studies had to:

- be empirical research or reviews
- be focused on motivational interviewing or interventions with similar characteristics and principles
- be published online or in print form
- be available in abstract, journal article, or full report form
- address one or both of the core questions this scan set out to address.

There were no language restrictions and studies related to healthcare and those outside health (such as education and criminal justice) were eligible for inclusion.

More than 10,000 pieces of potentially relevant research were scanned. Those that were most relevant for addressing the questions of interest were examined in detail.

Data were extracted from all relevant publications using a structured template and studies were grouped according to key questions and outcomes to provide a narrative summary of trends.

No formal quality weighting was undertaken, apart from the selection process outlined above.

143 studies of relevance to the substantive areas of interest were included in the synthesis.

1.4 Caveats

When interpreting the findings of the scan it is important to bear in mind several caveats.

Firstly, the scan is not exhaustive. It presents examples of relevant research, but does not purport to represent every study published about the characteristics of training and the characteristics of professionals offering motivational interviewing.

The scan attempted to be inclusive. Studies about initiatives based on the principles of motivational interviewing were included in the scan, regardless of whether this term was explicitly used. Studies about training where motivational interviewing was one part of a larger initiative were also included if relevant. However the search terms used focused on motivational interviewing, so other similar interventions may not always have been identified.

Secondly, the focus is on published empirical research. Internal evaluations, unpublished material and narrative or descriptive overviews are not included. Articles may have theorised about the important traits of training, trainers and professionals offering motivational interviewing, but these were not eligible for inclusion.

Much of the available evidence comes from the US which has a very different health system to the UK, as well as variations in how professionals are trained and supported. This may impact on the extent to which the findings from these studies apply to the UK.

Although the scan aimed to examine the most effective characteristics of training, trainers and professionals offering motivational interviewing, the conclusions we can draw are limited due to a lack of comparative evidence. Studies tend to describe one particular training approach, but not to compare various approaches, characteristics or pre-requisites. This makes it difficult to compare the relative effectiveness or appropriateness of varying approaches or the characteristics that may be most beneficial in professionals offering motivational interviewing or providing training.

Conclusions are further limited because most studies have some methodological difficulties such as being observational, small scale and based at single sites. Finally, there is a lack of evidence about the strengths and weaknesses of various training approaches and about the practical implications of using them in different settings. This lack of evidence does not mean that specific approaches are ineffective or unhelpful, just that little research is available about them. A good example here is train the trainer approaches, which have not been explored in depth.

Despite these caveats, the scan identified a number of studies describing various approaches for training professionals in motivational interviewing skills and some more generic literature about the traits of counsellors and potential motivational interviewers. We now turn to summarising the key literature in this area.

2 Characteristics of training

This section describes research about the context, type, content and length of training to increase motivational interviewing skills, and the characteristics of those providing training.

Several systematic reviews, 55,56 randomised trials 57–59 and observational studies 60–65 have examined the benefits of training various professionals in motivational interviewing skills. These studies tend to emphasise that training can increase the skills and knowledge of professionals and lead to improvements in the way they involve and motivate patients. 66–71

For example, researchers in the US assessed training clinicians from five community substance misuse programmes to deliver a three session adaptation of motivational enhancement therapy. Counsellors were trained using a combination of expert led intensive workshops followed by clinical supervision. The training helped counsellors adhere to the motivational interviewing model and increased their skills. This was in turn associated with improvements in patient motivation compared to usual counselling and some improvements in patient behaviours.^{72,73} This suggests that training professionals in motivational techniques not only improves their skills, but has follow-on impacts for patients.

Reviews and studies are also available about the best ways to measure the skill levels of professionals and the extent to which they adhere to motivational interviewing principles and techniques.^{74–77}

However, fewer studies have examined the characteristics of training that makes it most effective. Those studies that do explicitly examine the components of training tend to focus on where and how training is delivered, the strategies and content used within training programmes and the duration of training.

This section summarises research about:

- the context of training, including embedding training as part of the core curriculum
- the mode of training, such as face-to-face workshops, online courses and ongoing supervision
- the content and activities of training, including the use of videos, written assignments and role plays
- the duration of training.
- and the characteristics of those providing training.

2.1 Context of training

A number of studies have examined the context in which training is offered. The two most commonly described approaches are embedding training in the core or optional curriculum of professionals at pre-registration^{78–84} or postgraduate level or offering training as part of continuing professional development.

Studies have not compared the relative effectiveness of these approaches. Instead each approach is described in individual studies. This makes comparisons about the most effective methods difficult.

Embedding training in the core curriculum

In the US, basic motivational interviewing skills are increasingly being integrated into the standard curriculum of medical, nursing, pharmacy and dental students.^{85–87} Examples of these studies are included throughout other sections, and a small number of illustrations are provided here.

One study described how 53 third year medical students took part in a four week course consisting of four two hour sessions, run in small groups of eight to 12 students. Educational approaches included short lectures, video demonstrations, small group role plays and interactive exercises. Before and after surveys found improved motivational interviewing knowledge and skills.⁸⁸

Some studies suggest that it is beneficial to embed training into the medical curriculum early. For example, 42 first year medical students in the US were taught motivational interviewing using three small group sessions with brief lectures, interactive class activities, student role plays and simulated patients. Students reported improved understanding of motivational interviewing and before and after surveys found improved knowledge and confidence.⁸⁹

In another study, 147 first year medical students in the US were taught motivational skills to help people give up smoking. Learning strategies included lectures, demonstrations, reading, quizzes, role play exercises and practice sessions with standardised patients. The training was associated with increased knowledge and self confidence in applying behaviour change skills. Two months later, half of the students reported applying the skills in clinical settings, often for behaviours other than smoking. This suggests that exposing students early on in their careers to the concepts of motivational interviewing may have an impact on how they interact with patients generally.

However, not all studies about embedding motivational interviewing skills into routine training have been successful. Whether or not embedded training is successful may be linked to the amount of time spent teaching motivational interviewing skills within the wider curriculum.

For example, third year medical students in the US were taught motivational interviewing using lectures, small group teaching and practice with role plays. Performance was assessed using a videotaped interview with a standardised patient. Students had a basic level of proficiency, but still struggled to use open-ended questions.⁹¹ This suggests that not all motivational interviewing skills can be learned fully within short training sessions.

Elsewhere in the US, a two hour session about motivational interviewing was developed for third year medical students. The session involved a presentation followed by interactive role plays. At the end of the year, the skills of those who had and had not participated were compared. Students who had participated were more skilled in some motivational interviewing techniques than those who did not take part, but overall there were few differences in patient centred counselling skills or collaborative change planning. A two hour session did not appear to be effective for changing students' supportive behaviours.

To summarise, there is mixed evidence about the benefits of including training in motivational interviewing as part of the core curriculum. Some studies suggest this can improve students' skills and the way they work with patients, especially if begun early. Short or one-off training sessions are generally not most effective as part of the core curriculum, but we found no studies directly comparing different durations or approaches to embedding training.

Continuing professional development

Studies about training in motivational interviewing as part of continuing professional development are summarised in more depth in the sections about workshops and training content. Much of the available research in this area focuses on training substance abuse counsellors in supportive techniques. Often the training was specifically set up as part of a research study, rather than observing routinely offered continuing professional development.

As with research about training students, studies about training fully qualified professionals also have varying levels of success regarding improvements in professionals' skills. 93–97 Most do not explore the impact of training on patient motivation or behaviours.

Characteristics of continuing professional development courses which have been found to be effective are described below in terms of learning approaches, content and duration of training.

Overall, there is mixed evidence about the benefits of motivational interviewing courses for qualified professionals. Some studies suggest this can improve professionals' skills, especially if the training involves practical sessions and ongoing supervision. Importantly, there is no comparative evidence about whether continuing professional development courses are more or less effective than embedding training in student curricula.

2.2 Mode of training

Research is available about the training techniques used to help professionals learn about motivational interviewing, such as whether training is face-to-face, online, self study and so on. The most commonly researched approaches include:

- workshops^{98,99}
- lectures 100-102
- supervision^{103–107}
- self study^{108,109}
- distance learning¹¹⁰
- train the trainer approaches 111-113

Workshops

Most continuing professional development approaches studied use workshops. There is some evidence that relatively short workshops can be useful for introducing the concepts of motivational interviewing. For instance, 22 addiction and mental health clinicians in the US took part in a two day workshop about motivational interviewing. Practice sessions with a standardised patient were taped. Before and after surveys found improvements in skills, which remained two months later.¹¹⁴

Numerous other studies suggest that workshops can increase knowledge and skills, especially when combined with practice and support.^{115–118}

There are also studies about the content and techniques used within workshops, such as role plays and videos. 119,120 These are summarised in the section below about training content.

Distance learning

A small number of studies have examined the benefits of distance learning. For example, in the US five live video workshops describing elements of motivational interviewing were delivered as a distance learning course for professionals supporting drug users. Each video workshop lasted three hours and was spaced one month apart. Participation in the five workshops varied, with the first being the best attended. Participants were moderately satisfied with most aspects of the training, but some were frustrated by interrupted audio or video signals during the programmes. Handouts and videotaped examples of motivational interviewing were thought to be most useful. Participants reported improvements in self perceived knowledge and skills, but objective assessment found few changes in skills. 121

Motivational interviewing has also been taught as one component of broader distance learning courses. For instance, 46 mental health professionals were trained in exposure therapies for anxiety disorders. They were randomised to one of three groups: interactive online training; online training plus brief motivational interviewing training; or no intervention. Online training alone or with additional sessions in motivational interviewing was well received and helped increase knowledge and skills application. Motivational interviewing was associated with the greatest changes in clinicians' attitudes. 122

Another example is a resource toolkit developed to help substance abuse professionals in the US learn about decisional balance, a component of motivational interviewing. This intervention is a little different because it provided resources to help professionals engage with patients - the resources served to both enhance professionals' skills and knowledge and be used directly with patients. The toolkit included a DVD to be shown during group counselling sessions, a laminated counsellor guide to provide prompts for use during group sessions, and worksheets and wallet cards for patients. Feedback was provided by 26 counsellors and 210 of their patients. Most counsellors and patients were satisfied with the group session and the tools were well used. Minimal training was needed to help counsellors use the tools.¹²³

In summary, evidence from a small number of studies suggests that motivational interviewing can be learned using distance education methods such as videos, online courses and toolkits. This type of training may work best when supplemented with follow up and extra resources.

Supervision and ongoing support

The value of supervision and ongoing feedback has received some attention, either used alone or as part of a wider training package. ^{124,125} In fact, supervision is one of the most commonly researched topics regarding motivational interviewing training. ¹²⁶

Practitioners receiving supervision may include peer or lay counsellors, students or fully qualified professionals of various types.

For instance, researchers in the US examined the value of supervision following workshops for peer motivational interviewers aiming to reduce problematic drinking in university students. 122 motivational interviewers were trained using identical protocols. After training one group was randomly assigned to receive supervision and the other group received no supervision. Those who received supervision were more likely to have an improved communication style, but there was no impact on patients' behaviour change. 127

Researchers in England tested training adolescent drug treatment practitioners in motivational interviewing. Training and supervision were found to have no impact upon skill levels, but increased knowledge about the spirit of motivational interviewing. Motivational interviewing was not easy for these practitioners to learn. Ongoing supervision was important for sustaining momentum to use the techniques.¹²⁸

Supervision is generally well regarded by those learning motivational interviewing. Interviews with a diabetes team undergoing training in motivational interviewing and behavioural change techniques found that acquiring the competencies was harder to achieve than initially thought, though most competencies were evident after one year of training. The most valued training methods were individual supervision and video examples.¹²⁹

Supervision can take place face-to-face or by telephone. An example of personalised face-to-face supervision is described in an evaluation of a glaucoma educator trained to use motivational interviewing in an ophthalmology practice in the US. A treatment manual was designed by a multidisciplinary team and the glaucoma educator received six hours of training including role play exercises, self study and individual supervision. The educator's knowledge and skills increased following training and patients assigned to the glaucoma educator improved over time in both motivation and medication adherence.¹³⁰

Elsewhere in the US, supervision by telephone was used to enhance the motivational interviewing skills of community based substance abuse clinicians. After a two day workshop, 13 clinicians received telephone supervision during five counselling sessions conducted at their community facilities. Their skills improved over time. The evaluators concluded that teleconferencing supervision helps to facilitate the use of motivational interviewing skills.¹³¹

Another example is counsellors working at a national smoking quitline in Sweden, who received supervision in motivational interviewing over a two and a half year period. Counsellors' motivational interviewing skills improved but there was significant variation in skill between counsellors, and fluctuations in performance by individual counsellors. Evaluators suggested that continuous feedback and supervision after initial training is needed to ensure that the quality of motivational interviewing remains high.¹³²

Ongoing support of various types (rather than formal supervision) has also been examined. For instance, one study assessed whether workplace based education helped professionals who had been trained in motivational interviewing become more competent. 54 health and social services professionals from England who had already been trained were randomised to receive either an update day in motivational interviewing or the THEME intervention (Twelve Hours to Enhance Motivational Effectiveness). This comprised the update day plus 12 weekly worksheets to stimulate reflection on practice, feedback on audiotaped sessions with clients and three 30 minute sessions of telephone coaching. This detailed ongoing support was associated with improved competence in motivational interviewing.¹³³

Novel ways to provide ongoing support have also been tested. A trial in Australia examined whether a 50 minute education session and three months' worth of email and telephone support improved 120 professionals' ability to set SMART goals with patients. Education and follow up support was associated with improved goal writing skills after three and six months. Changes were modest and developed over the six month period. 134

Group support has also been tested. In the US, 10 community mental health therapists were trained in motivational interviewing to support people with co-occurring disorders. Training comprised a two day didactic and practical workshop followed by eight bi-weekly small group supervision (coaching) sessions. There was a significant improvement in motivational interviewing skills over time. 135

But studies from outside healthcare suggest that supervision and ongoing support isn't always of benefit. In Sweden, prison counsellors have provided motivational interviewing with some success.136 In one study 296 inmates using drugs were randomised to receive 1) motivational interviewing delivered by counsellors who had been trained using workshops; 2) motivational interviewing delivered by counsellors trained using workshops followed by peer group supervision; or 3) no intervention. Ten months after release from prison all participants had reduced alcohol and drug use. Counsellors receiving supervision were no more effective in supporting behaviour change than others.¹³⁷

Other studies have investigated the value of a stepped approach to training, whereby greater degrees of support are provided for those who need it. For instance, researchers in the US examined a criterion-based staged approach for training counsellors in motivational interviewing. The three stages were a distance learning online course, followed by a skill-building workshop, followed by competency-based individual supervision. Participants only moved on to the next step of training if they failed to perform effectively. Those who performed adequately following the online course continued to demonstrate similar levels of competence over a 24 week period without additional training. Counsellors who showed inadequate motivational interviewing performance immediately after taking the online course and who subsequently participated in a workshop or supervision improved their performance over time. The authors concluded that different professionals require varying types and amounts of training to perform behavioural treatments well. 138

Overall, it appears that supervision following training in motivational interviewing can improve professionals' skills further and may in fact be essential for sustainability. However the impact of ongoing supervision and support on patient outcomes is less clear. Similarly, the best way to provide supervision and ongoing support remains uncertain. Face-to-face, telephone, email and group support have all been used with some success.

Comparative studies

Of all of the studies about training in motivational interviewing, the mode of training is the area where the most comparative research is available.

For instance, studies have compared the benefits of active learning strategies versus self guided study. One trial randomised 140 substance misuse professionals in the US to one of five training groups to learn motivational interviewing. These groups were: clinical workshop only; workshop plus practice feedback; workshop plus individual coaching sessions; workshop, feedback and coaching; self guided training. Audiotaped practice sessions were analysed before and at several times after training, up to one year later. Compared to the self guided training, all those taking part in active training had larger gains in proficiency. Coaching or feedback or both increased proficiency following the initial training period. 139

Another randomised trial in the US compared teaching motivational interviewing to 92 community clinicians using expert led training, train the trainer strategies or self study approaches. The expert led and train the trainer approaches used workshops and three monthly supervision sessions with feedback and coaching. Clinicians in the self study group received only training materials. Compared to self study, expert led and train the trainer approaches both improved clinicians' use of and competence in motivational interviewing. There were few differences between the expert led and train the trainer groups. 140

Self study methods may have some advantages, however. Investigators in the US examined the cost effectiveness of three strategies for training community clinicians in motivational interviewing: self study, expert led sessions and train the trainer approaches. The study found that self study is likely to be the most cost effective training strategy, but expert led sessions are also of value.¹⁴¹

While a number of studies have examined the value of workshops, distance learning, and feedback and supervision individually, less is known about the relative effectiveness of these approaches.

The relatively few comparative studies available suggest that, while self guided study and distance learning approaches may cost less, they may also be less effective overall in enhancing professionals' skills and knowledge.

Overall, active learning strategies incorporating workshops and ongoing supervision and support may be most worthwhile. Train the trainer approaches may be no more effective than expert led workshops and may cost more.

2.3 Content and activities

Research is available about the content of motivational interviewing courses. This includes the **substantive** content within courses as well as **activities** such as role plays or video sessions. Most research focuses on the content and activities included within workshops.

For instance, a systematic review of training GPs in motivational interviewing found that the average length of training was nine hours. The most commonly addressed topic areas included basic motivational interviewing skills, the spirit of motivational interviewing, recognising and reinforcing change talk and 'rolling with resistance.' Most courses included follow up training sessions rather than just one-off workshops or a short series of workshops.¹⁴²

The majority of studies in this area are descriptive and observational. They outline the structure and content of training programmes and sometimes the outcomes, but they do not compare one type of content with another or allow conclusions to be drawn about the most effective content and approaches.

Substantive content

Most empirical studies do not describe the substantive content of courses about motivational interviewing. They may state that the principles of motivational interviewing are covered and outline the teaching techniques used, but little in depth information is provided about the specific content of courses.

We identified two exceptions which explored the content of courses in more detail.

Linking motivational interviewing techniques with wider theories of change may be useful. In the US, a course was developed for 30 primary care internal medicine residents. The programme linked motivational interviewing training to the self management support component of the Chronic Care Model, which was introduced during three taught modules and then reinforced in the clinical setting. Teaching strategies included case based interactive instruction, watching videos, group role plays, faculty demonstration, and observation of resident-patient interactions in the clinical setting. Residents reported increased confidence when approaching patients about health behaviour change and independent observation found more collaborative work with patients. 143 This suggests that linking teaching about motivational interviewing techniques with other models and theories supporting self care may be beneficial.

Context tailored training involves using standardised patient actors in role plays tailored to a clinical context, repetitive cycles of practice and feedback and enhanced organisational support. In other words, there is a mix of specific content and particular training techniques.¹⁴⁴ A randomised trial in the US compared context tailored training for motivational interviewing versus a standard two day motivational interviewing workshop for community substance abuse treatment agencies. Context tailored training was more expensive but resulted in greater participant satisfaction. There was no difference in skill acquisition or maintenance between groups. 145 This suggests that linking teaching about motivational interviewing to the context in which the skills will be applied and providing specific content about these interlinkages may be viewed positively by participants, but there is no evidence that this improves professionals' skills or patients' behaviours.

As well as courses specifically about motivational interviewing, training about other topics may also include motivational interviewing as one component of the content. For instance, a review of published and grey literature available between 1999 and 2009 and a survey of key informants found that more than 170 postgraduate training programmes in smoking cessation were available for doctors working in Europe. Motivational interviewing was a component in 85% of courses and training in the stages of change was included in 89%.¹⁴⁶

Similarly, postgraduate education for doctors about smoking cessation was examined in eight countries outside Europe. 64% of courses included information about the stage of change and 72% covered motivational interviewing. The most common model of delivery was face-to-face. However, these types of studies merely show that training in motivational interviewing may be increasingly widely available, but not what this training comprises or what makes training most effective.

In summary, little empirical work describes the substantive content included in training about motivational interviewing or how motivational interviewing content is integrated into other courses. There is insufficient information available to draw conclusions about the most effective content to include when training professionals in motivational interviewing.

Simulations and role play

There is more research available about the content of activities included within training. A number of studies suggest that practice sessions, simulations and role plays can improve motivational interviewing skills.¹⁴⁸

Simulations and practice sessions may be offered as a standalone training technique or, more commonly, as part of workshops or other structured training approaches.

An example of using simulations alone comes from Australia where researchers examined whether simulated patients could increase the skills of GPs delivering a behavioural intervention to reduce childhood obesity. 67 GPs from 46 general practices conducted two simulated consultation visits regarding healthy lifestyle behaviour change. The GPs and simulated patients rated GP performance immediately after each consultation. 139 parents of overweight or obese children subsequently rated GP performance during real consultations. Simulated patient ratings of GP performance predicted parental ratings of real consultations and weight loss over time. GP ratings of performance did not predict these outcomes. 149 This suggests that simulations can help predict professionals' motivational interviewing skills, but practitioner self report methods may not be the best measure of success.

Other studies have explored using practice sessions or simulations as one component of courses about motivational interviewing. For instance, an evaluation examined a 12 hour motivational interviewing course spread over six sessions for HIV lay counsellors in South Africa. Role plays and lectures were used. There was an improvement in motivational skills and less advice-giving, directiveness, control and confrontation. ¹⁵⁰

Even relatively short practice sessions may be useful. Researchers in the US developed a patient communication simulation laboratory for hospital nurses. Nurses attended a didactic lecture and then completed two hours' worth of simulation focused on empathetic communication and motivational interviewing. Before and after analysis found that nurses' self rated confidence in initiating difficult conversations increased, as did their ratings of their overall ability to communicate with patients. These perceived improvements remained after four months.¹⁵¹

Research is beginning to investigate whether simulations should be conducted with actors/ simulated patients or whether practice with peers is just as effective. For instance, healthcare professionals who attended a two-day workshop about motivational interviewing in Wales were randomly assigned to conduct skills practice sessions with either a simulated patient or a fellow trainee. There was no significant difference in skill levels between groups. The researchers concluded that trainees reached the same level of competence regardless of whether they practised with a simulated patient or a fellow trainee during training.¹⁵²

Similarly, US investigators tested whether using standardised patients to teach motivational interviewing to third year medical students was more effective than using student role plays. 93 family medicine clerkship students took part. One group was randomly assigned to practise motivational interviewing with one another and the other practised with standardised patients. There was no significant difference in skills between groups. These studies both suggest that practicing motivational interviewing is useful, regardless of whether this is with peers or simulated patients.

To summarise, practice sessions and role plays can be useful for increasing motivational interviewing skills. Practicing with peers during workshops may be just as effective as using actors or more formal simulation approaches.

Videos

Videos are sometimes used within workshops about motivational interviewing.

Researchers in the US tested an approach for measuring and improving motivational interviewing skills. Videotaped vignettes of actors playing substance abusers were followed by eight questions asking trainees to generate written responses consistent with motivational interviewing principles. Tests found this worked well to assess the motivational interviewing techniques of reflective listening, responding to resistance, summarising, eliciting change talk and developing discrepancy.¹⁵⁴

Other investigators in the US assessed 20 minutes of videotaped training about motivational interviewing skills for problem drinking. 30 obstetric care practitioners were assigned to watch a video or to a control group. Practice sessions were conducted before and after. The training video was thought to be clear in explaining and demonstrating the principles and skills of motivational interviewing. The video group had significantly improved skills compared to the control group.¹⁵⁵

To summarise, a small number of studies suggest that videos can be used alone or as part of workshop sessions to help enhance motivational interviewing skills.

Written assignments

Written assignments may have some merit. Third year dental students in the US received three hours of instruction on motivational interviewing theory and techniques, used the method with a patient and reported on their session in a written submission. The evaluators found that students applied motivational interviewing skills, appropriately matched their discussion to the patient's stage of readiness to change, recognised patient resistance and responded to resistance. Having a written assignment appeared to be effective for assessing the use and understanding of the techniques. ¹⁵⁶

Other researchers in the US described a written assignment that aimed to increase knowledge about motivational interviewing in a first year pharmacy course. Students were asked to write a script for a virtual patient that specified the text for the virtual patient's comments and two to five possible responses for a student pharmacist to choose from. The study found that the computer programme used to run the assignment was confusing and time consuming. This distracted from learning about motivational interviewing. However, this learning approach was associated with better grades compared with other teaching methods.¹⁵⁷

Thus, a small number of studies suggest that written assignments may be feasible for enhancing skills, but they need to be implemented appropriately so as not to distract from the learning process.

Applying methods to own behaviour

Researchers have found that asking students and professionals to apply motivational interviewing and behaviour change techniques to their own behaviour can be useful.

An example comes from Scotland where dental students learned behaviour change techniques to motivate patients. 33 second year and nine third year undergraduate dental students took part in two related studies. Students were taught to identify antecedents to their own snacking behaviours, set goals and use behaviour change techniques to modify their own behaviours. The students thought that training in how to apply behaviour change skills to their own behaviours was useful and impacted on the extent to which they felt comfortable and confident using these techniques with patients. ¹⁵⁸ Seeing that the techniques really worked may have been an important part of this.

Similarly, researchers in New Zealand tested an approach for teaching behaviour change principles to medical students. Students were asked to change a self identified aspect of their own behaviour. Most students said they enjoyed the project and it helped them learn the processes of behaviour change.¹⁵⁹

To summarise, although research is sparse in this area, there is emerging evidence that asking practitioners to apply behaviour change principles to their own behaviour may be a useful learning approach.

Feedback

The impact of feedback during training sessions has been considered, with mixed findings. Feedback has been included in both pre-registration curricula and continuing professional development workshops.

For instance, 18 paediatric resident trainees in the US were randomised to receive or not receive short motivational interviewing training. The training consisted of nine hours of teaching plus written feedback about residents' communication skills. Skills were assessed using practice sessions with standardised patients. Evaluation found that combining training plus personalised feedback increased residents' motivational interviewing skills. However this conclusion is limited because the study did not compare training with and without feedback so the impact of feedback itself is uncertain.

Other researchers in the US examined whether coaching improved motivational interviewing skills amongst dental hygiene students. Students were audiotaped during two brief patient education sessions. After the first session, students received feedback and coaching in motivational interviewing before taking part in a second taped practice. There was an improvement in the use of open questions, complex reflections and motivational interviewing adherence following coaching and feedback, but not in 'change talk' or the amount of reflection. ¹⁶¹

Formal methods of assessing motivational interviewing skills and providing feedback have been tested. 162 The most commonly researched tool is the Motivational Interviewing Treatment Integrity Code (MITI). In Sweden this tool was tested by comparing motivational interviewing sessions versus information and advice giving sessions and by comparing trained motivational interviewers with untrained practitioners. The tool differentiated between practitioners with different levels of training as well as between motivational interviewing and advice giving counsellors. The researchers suggested this feedback approach could be used as a training tool alongside supervision. 163

Other studies have also found that this tool can be a useful learning and supervision aid and can differentiate between those who have good motivational interviewing skills and those who do not.^{164–168} Another feedback approach is the video assessment of simulated encounters tool (VASE and VASE-R), which is a video-based aid for assessing motivational interviewing skills. The tool has been found to be useful for differentiating between practitioners with different skill levels and providing feedback to help professionals improve their skills. 169

Similarly, the Behaviour Change Counselling Index (BECCI) is a checklist to measure practitioner competence in behaviour change counselling, an adaptation of motivational interviewing suitable for brief healthcare consultations. The checklist has been found to have acceptable levels of validity, reliability and responsiveness. ¹⁷⁰ However, we identified no research explicitly using this tool to provide feedback to enhance practitioners' skills.

PEPA, the 'peer proficiency assessment' tool, is another aid that has been used for evaluating and providing feedback about undergraduate peer counsellors' motivational interviewing skills.¹⁷¹

Overall a small number of studies have suggested that providing feedback within workshops or as part of other motivational interviewing training helps improve practitioners' skills. These studies are problematic however, because they do not tend to compare providing feedback with not providing feedback, so the value of feedback strategies remains uncertain. There is also a lack of information about the best way to provide feedback.

2.4 Length of training

Research describes varying durations of training to improve motivational interviewing skills.¹⁷² This may last from a short session of a few hours through to a course that spans several weeks or months.

An example of a short, day-long, training session comes from South Africa, where lay HIV counsellors were trained in motivational interviewing. A one-year follow up study found that lay counsellors maintained and in some cases enhanced their competence in motivational interviewing after attending the brief course. However the overall level of competence was low.¹⁷³

Similarly, researchers in Sweden examined the value of motivational interviewing for smoking cessation at nurse led chronic obstructive pulmonary disease clinics. Nurses received a few days of education in motivational interviewing-based communication. Two consultations with 13 smokers were videotaped and analysed. In conflict with the principles of motivational interviewing, nurses frequently focused on providing information and used closed ended questions. The authors concluded that brief training in motivational interviewing did not encourage nurses to use these skills for smoking cessation.¹⁷⁴

On the other hand, studies of workshops lasting between half a day and two days have found improvements in knowledge and skills that last at least for a few months. Tr5-178 For instance, third year medical students in the US were taught motivational interviewing during a two hour training session with standardised patients. Follow up tests after four weeks found increased use of motivational skills, including increasing the frequency and depth of reflections and reducing the number of communication roadblocks and closed questions. This illustrates that there are no clearcut conclusions about the best length of training for enhancing motivational interviewing skills.

In general, longer and more intensive training is associated with greater improvements in professionals' skills than short or one-off sessions. However, such conclusions are problematic because they are not based on comparative studies. Studies about longer and more intensive training are more likely to be associated with positive gains in clinician skills, whereas short sessions or one-off training is least likely to show positive change. But few studies explicitly compare long versus short sessions.

It may be that the length of training is less important than the content covered and the training methods used, such as opportunities to practice, gaining feedback about performance and ongoing supervision and coaching to use the skills in practice.

2.5 Characteristics of trainers

We were interested in whether the characteristics of those offering training in motivational interviewing might influence outcomes.

The research scan found no detailed empirical work examining the characteristics of **trainers** that best support motivational interviewing.

However, some studies have canvassed the characteristics of medical and clinical educators more generally (not specific to motivational interviewing).

For instance, researchers in the US examined what makes an exceptional clinical teacher according to residents and faculty at eight family medicine residency programmes. Residents and faculty agreed that being enthusiastic and having clinical competence are important attributes. Scholarly activity was not as important. Residents said it is important for an educator to respect their autonomy and independence as clinicians. Faculty felt that serving as a role model worth emulating was important, but residents did not. Residents placed more weight on a teachers' ability to answer questions clearly and explain difficult topics. 182

A review examined the essential qualities and skills required of a trainer, or educational supervisor, in UK general practice. Personal attributes and attitudes, communication skills, IT, educational knowledge, and educational skills were all thought to be important.¹⁸³

Similarly, researchers in the Netherlands sought feedback about the competencies of GP trainers using a modified Delphi process. 37 characteristics were identified as being important for a competent GP trainer, the most important of which were being good at giving feedback, being confident to give feedback, being critical of the GP trainee and the learning process, being good at communicating with the GP trainee and having respect for the trainee. Being able to inspire reflection in the trainee was also seen as important.¹⁸⁴

Ten focus groups in the Netherlands also examined the traits of effective GP trainers. The study found that a competent GP trainer should understand basic teaching methods and be able to apply this knowledge. Being able to give good feedback was seen as important, as were observation skills, the ability to analyse and being able to foster reflection in trainees.¹⁸⁵

146 dermatology specialist registrars in the UK described the attributes of effective trainers. Four attributes were identified as being important: having an encouraging and supportive attitude, using feedback to identify areas for attention, being approachable and being willing to answer questions. Least important attributes included openness to criticism of teaching skills, auditing own clinical practice, sense of humour and whether trainers worked in a district general or teaching hospital. Being uninterested in training, being unapproachable or unavailable, or undermining the trainee and using unconstructive criticism were seen as problematic.¹⁸⁶

Researchers in Iran examined ten nursing students' and faculty members' perceptions of effective clinical educator characteristics. Personal traits, meta cognition, making clinical learning enjoyable, being a source of support and being a role model were seen as key to the role.¹⁸⁷

Whilst these studies provide feedback about the traits of trainers that are seen as beneficial generally, it is uncertain whether these traits also apply to those providing training in motivational interviewing.

2.6 Summary

In summarising the characteristics of effective training in motivational interviewing, the key message is that a number of studies have examined approaches for increasing professionals' skills regarding motivational interviewing but little research compares whether one approach is more effective than others. Techniques found to be useful include:

- workshops rather than self guided study
- practice sessions and role plays
- ongoing supervision
- use of a variety of techniques to get participants engaged such as videos, simulations and written activities
- applying techniques to own behaviour
- practicing with other trainees or with actors / simulated patients

3. Characteristics of professionals

This section summarises research about whether certain types of professionals are more or less effective at motivational interviewing and any other characteristics of professionals that may have an impact.

Relatively little research has been published about the characteristics of those offering motivational interviewing that may impact on its effectiveness.

Here we collate material about some of the different types of professionals that provide motivational interviewing and the traits and skills of professionals that may be important when using this approach.

3.1 Roles

The following groups have all been involved in studies of motivational interviewing and training:

- $-GPs^{188-191}$
- medical students¹⁹²⁻¹⁹⁷
- practice nurses, specialist nurses and nurses providing telephone support^{198,199}
- pharmacists and pharmacy students^{200–203}
- dentists and dental hygienists^{204–207}
- social workers and social work students^{208,209}
- health educators for specific long term conditions^{210,211}
- drug and alcohol misuse professionals²¹²⁻²¹⁸
- physicians' assistants²¹⁹
- allied health professionals such as dieticians and podiatrists^{220–223}
- peers, carers and lay workers²²⁴⁻²²⁸
- psychologists and psychiatrists,^{229,230} counsellors, high school counsellors, therapists and other mental health professionals^{231–234}
- emergency workers.

For example, in the US peer facilitators were trained to provide motivational interviewing to reduce problematic drinking in university students. Peer facilitators worked well if they had reflective listening skills but continual training and supervision was needed.²³⁵

Another study examined a three hour elective course for pharmacy students. The training included required readings, interactive lectures, in-class demos and practice sessions, out of class skills practice, one-to-one supervision provided by doctoral level psychology students and written reflections on each class session. The course improved skills, attitudes and confidence in using motivational interviewing skills.²³⁶

In the Netherlands 19 GPs were trained in behaviour change counselling, a technique derived from motivational interviewing. After training, GPs' attitudes and confidence improved and all reported using the skills at least sometimes four to ten months after the training.²³⁷

Other researchers in the Netherlands tested whether basic training in motivational interviewing for home care dieticians changed their counselling style and improved their patients' diet and risk behaviours. 37 dieticians and 142 people with diabetes took part. At follow up, those who received training were more empathetic, showed more reflection during consultations and were more likely than the control group to let their patients talk for the majority of the consultation. Their patients had lower saturated fat intake levels compared to the control group.²³⁸

Nursing staff in the UK were trained in the use of motivational interviewing to address sexual health issues and safer sexual behaviour among people living with HIV and AIDS. Researchers found that by providing a positive training experience, frontline health staff can develop their skills and confidence to help patients change their behaviour and prioritise prevention.²³⁹

These studies merely provide a flavour of the different types of professionals who have been trained in and tested motivational interviewing. Numerous similar studies are available, but we identified few studies examining whether one type of professional is more effective than another at providing motivational interviewing. This means it is not possible to draw conclusions about whether nurses are more effective than dentists or GPs are more effective than specialists, for instance.

We identified a small number of studies currently underway which may shed light on this. For example, a randomised trial is being conducted in England comparing telephone motivational interviewing by a diabetes specialist nurse or by a peer supporter versus routine care only. Nurses and peer supporters took part in a two day training session about motivational interviewing, empowerment and active listening skills. The results of this trial are not yet available, but this study will help compare the value of motivational interviewing by peers versus specialist nurses.²⁴⁰

There are some related studies that may have implications for motivational interviewing. In the Netherlands, GPs, practice nurses and physiotherapists implemented a lifestyle change intervention. Practice nurses had lower motivation to continue implementation compared with other professionals. Social support by colleagues and perceived advantages of the intervention for the professionals themselves were linked to professionals' initial motivation to implement it. High baseline self efficacy and not being a practice nurse predicted professionals' motivation to continue the intervention.²⁴¹

Researchers in England examined factors influencing the recruitment and training of therapists and their competence to practice one of two psychological therapies for alcohol dependence: social behaviour and network therapy or motivational enhancement therapy. 72 therapists were randomly assigned to be trained in one or the other method. 72% achieved competence. Length of prior experience did not predict completion of training, but therapists with a higher university qualification were more likely to complete as were medical practitioners.

It was more difficult and took longer to train therapists in motivational enhancement therapy.²⁴²

In summary we can say that many different groups have been trained to offer motivational interviewing but there is little evidence about whether one professional group is more effective or motivated to offer this approach than others.

3.2 Traits

There is a real paucity of published research about the traits of effective motivational interviewers. We searched for studies about the impact of demographic characteristics, skill sets and personality traits, but there were few comparative or descriptive studies in this area. We identified research about the skills and education levels, demographics and personality traits and attitudes of practitioners, but all of these were largely descriptive and relatively small scale.

Motivational interviewing skills

Some studies suggest the importance of factors such as empathy and reflective listening, ^{243–245} but it is unclear whether these are viewed as inherent traits of those offering motivational interviewing or skills that can be taught and learned. Other studies have found that levels of empathy and alliance have little impact on patient outcomes so evidence about useful or required traits is mixed. ²⁴⁶

Researchers in Switzerland examined the influence of counsellor skills during brief motivational interventions on patient alcohol use 12 months later. Five counsellors with similar backgrounds and training delivered 95 sessions. Counsellors with better motivational interviewing skills achieved better outcomes. Counsellors with poorer skills were mainly effective amongst patients with high levels of ability and desire to change.

Avoiding skills inconsistent with motivational interviewing techniques was more important than actively using strategies consistent with motivational interviewing approaches. The researchers concluded that the training and selection of counsellors should be based on the overall aptitude and appreciation for the philosophy of motivational interviewing rather than competence in particular techniques.²⁴⁷

Some studies have explored the strategies or skills exhibited by successful motivational interviewers. For instance, researchers in the US analysed 503 recordings of a simulated 20 minute clinical encounter using motivational interviewing. Proficient motivational interviewing was characterised by elicitation and reflective listening as opening strategies, followed by more in-depth reflective listening during the middle segments and increased use of elicitation and information provision as the sessions came to a close.²⁴⁸

Another study examined the relationship between counsellor language and client language, personalised feedback and client language, and client language and client drinking outcomes in a sample of heavy drinking university students receiving motivational interviewing. Motivational interviewing was delivered in a single session with or without a personalised feedback report. In the group that received motivational interviewing and a feedback report, counsellor language consistent with motivational interviewing principles was positively associated with client change talk.²⁴⁹

Also in the US, an analysis of 103 motivational interviewing sessions for substance abuse found that therapists' interpersonal skills were associated with patient involvement and cooperation, disclosure and expression of emotion.²⁵⁰

15 people hospitalised with heart failure in the US received home visits after discharge from nurses trained in motivational interviewing. Participants received an average of three home visits over a three month period. Factors thought to make the intervention effective for promoting self care included reflective listening and empathy; acknowledging cultural beliefs, overcoming barriers and constraints and negotiating an action plan; and bridging the transition from hospital to home by providing information, building skills and activating support resources.²⁵¹

Studies have also examined the characteristics of good coaches and motivational leaders, though this work is not specific to motivational interviewing. Key characteristics include being inspiring, intelligent, competent, honest, fair minded, broad minded, straightforward, imaginative, self aware and emotionally intelligent.²⁵²

Thus, research is available about the skills and strategies exhibited by effective motivational interviewers. Empathy, effective communication skills, a focus on patient empowerment and avoiding judgments, closed questions and directive advice are thought to be worthwhile.

Demographics and personality traits

Little research has examined whether professionals of a particular age, gender, ethnic group or educational profile are more or less effective at motivational interviewing. One randomised trial in the US found that counsellors with more formal education and less endorsement of a particular disease model made the greatest gains in motivational interviewing skills during training. Counsellors who viewed their organisation as being more open to change also showed more gains in skills.²⁵³ However apart from this, little comparative information is available specifically about motivational interviewing.

Some research is available about the demographic and personal traits of effective 'counsellors' or those seeking to influence health behaviour change more generally, though it is uncertain whether these traits also hold for those offering motivational interviewing.

For instance, researchers in the US evaluated how a doctor's weight, exercise habits and personality traits could influence patients' willingness to exercise. 411 patients were surveyed from one primary care clinic. People with higher education levels were influenced by the doctor being of appropriate weight, a regular exerciser and a non smoker. Patients with higher income said they would be influenced by a doctor being of appropriate weight and a non smoker. Both of these groups were also influenced if the doctor enlisted the use of other experts and provided counselling.

Women were influenced if doctors were well groomed, well dressed, accessible and good listeners. The authors concluded that the personal traits of doctors have an impact on the extent to which information and support regarding exercise is well received by patients. Being seen as 'good role models' was important.²⁵⁴

In the US, personality characteristics have been examined when considering admissions to counselling programmes. Experts ranked 22 personality characteristics according to importance and responsiveness to training. The most important included empathy, acceptance and warmth. The least important were resourcefulness, sympathy and sociability.²⁵⁵

Researchers in the US examined the characteristics of 159 non professional counsellors supporting young offenders in a diversion programme. There were no significant relationships between counsellors' personality traits and attitudes and client outcomes.²⁵⁶

A number of tools have been developed to measure empathy, openness and counselling skills generally,^{257,258} but these have not been applied to motivational interviewers in any depth.

Overall there is insufficient research to draw conclusions about whether demographic and personality traits influence the effectiveness of motivational interviewing or training.

Attitudes toward motivational interviewing

The attitudes of professionals may impact on their willingness to offer motivational interviewing as well as their proficiency or effectiveness using the techniques involved.²⁵⁹

An example comes from a study of 66 clinicians from US community substance abuse programmes who volunteered to be trained in motivational interviewing. The characteristics of participants were assessed prior to training. Clinicians had varied levels of education and credentials. All had a high level of counselling experience, reported using a range of counselling techniques in their daily practice but had limited prior exposure to motivational techniques. In general, clinicians had beliefs consistent with theories that supported motivational interviewing. This suggests that those who may be most willing to use motivational interviewing techniques or volunteer to take part in training have an affinity with this style of support.

Not all professionals have such positive attitudes. Researchers in Australia found that, in general, dental students may have low opinions of the effectiveness of behavioural change interventions for smoking cessation. This may impact on their willingness to use and proficiency in smoking cessation counselling.²⁶¹

Healthy behaviours and self efficacy

The extent to which professionals eat healthily and exercise may impact on their confidence and proficiency in offering motivational interviewing to support healthy lifestyles in others.

A US study found that there may be a circular relationship between professional self efficacy and motivational interviewing skills. Nutritionists' physical self concept influenced the extent to which they felt comfortable offering motivational interviewing about exercise, especially to those from minority ethnic groups. Perceptions of their motivational interviewing skills also influenced their self efficacy for counselling clients from a culture different than their own.²⁶²

Another study suggested that medical students with healthy personal habits may have a better attitude towards preventive counselling. A survey of 661 students from eight medical schools in Colombia found that consuming five or more servings of fruit and vegetables daily and not being a smoker or binge drinker were associated with a positive attitude toward motivational counselling about healthy eating, smoking and drinking.²⁶³

Similarly, a survey of 233 health education students in the US found that students' desire to improve their fitness, nutrition, and weight were associated with self ratings as role models. In other words, if students were motivated to make changes themselves, they thought they could be role models and motivate others.²⁶⁴

Characteristics of patients

Interestingly, some studies have begun to examine how the characteristics of patients themselves may influence the outcomes of motivational interviewing.^{265,266}

Researchers in Switzerland found that patient characteristics, such as the type of language and words commonly used by patients, influences how motivational interviewers practice and the gains patients and professionals can make together.²⁶⁷

Confrontational behaviour by professionals has been associated with lower levels of patient behaviour change. Researchers in Wales explored whether resistance to change among smokers affected 32 professionals' confrontational behaviours. Role plays were used during a two day health behaviour change workshop. Professionals were randomly assigned to interview a standardised patient (actor) who displayed either high or low levels of resistance to change. When patients were highly resistant, professionals showed higher levels of confrontational behaviour, which is at odds with the principles of motivational interviewing. There were no differences in empathy.²⁶⁸ This suggests that patient behaviours may influence how professionals apply motivational interviewing techniques, and this in turn may influence the effects of this approach.

3.3 Summary

Relatively little has been written about the characteristics of the most effective motivational interviewers or the traits that make professionals good at this approach.

It has been suggested that empathy, reflective listening and not being too judgmental or directive are important skills. These are likely things that can be taught during training sessions.

There is no evidence about whether some types of professionals are more effective at motivational interviewing than others, such as doctors versus nurses.

Nor is there evidence about whether age, gender, ethnicity, education level or other demographic factors influence the effectiveness of motivational interviewers.

Some studies suggest that in order to be most effective, those providing behaviour change interventions must be confident about their skills and be good role models in terms of their own healthy behaviours.

Other studies suggest that having an aptitude for and appreciation of the underlying philosophy of motivational interviewing is an important trait, and it is uncertain whether this can be taught.

4. Summary

4.1 Key points

Motivational interviewing is gaining popularity as an intervention to support people to take more control and responsibility for their own health. The success of this approach may depend to a large extent on the skills of the professionals providing this support. 269,270 Although training in motivational interviewing is becoming more commonplace in undergraduate curricula, a recent survey in the US found that fewer than one in five doctors and nurses were familiar with motivational interviewing techniques. 271 There may be scope to increase the use of motivational techniques to support self management.

This scan examined the characteristics of effective training for motivational interviewing, including the characteristics of effective trainers; and the characteristics of effective motivational interviewers. The quantity of empirical evidence about these topics is sparse and most is of medium to low methodological quality (see Box 2).

Box 2: Quality and quantity of evidence

Торіс	Quantity of evidence	Quality of evidence
Characteristics of effective training		
Characteristics of effective trainers		•
Characteristics of effective motivational interviewers		•

Note: **red** = low **amber** = medium **green** = high

What are the characteristics of good training for motivational interviewing?

Research suggests that it is possible to train professionals and lay people to offer the simplest components of motivational interviewing during routine clinical practice.

Some studies suggest that even brief training can enhance the knowledge and skills of professionals and these improvements may last over time. However, professionals say they need more advanced and longer training in order to offer some of the more complex aspects of motivational interviewing.²⁷²

The characteristics of effective training may include:

- a focus on the underlying philosophy and principles of motivational interviewing rather than solely the technical aspects of asking questions and listening
- adequate duration to allow embedding of skills
- opportunities to practice skills through simulation and role play rather than relying solely on self study or written resources
- opportunities for ongoing feedback and supervision

What are the characteristics of good trainers in motivational interviewing?

There is growing interest among planners and policy makers about the individual characteristics or traits that facilitate the efficacy of motivational interviewing, including the characteristics of those providing training in motivational interviewing. This research scan searched extensively for empirical research in this area. Although a number of studies have examined a variety of different ways to train motivational interviewers, none of these studies focus on the characteristics of trainers themselves.

Research about medical educators more generally suggests that respect, active listening and empathy, communication skills and constructive challenging and feedback are all essential. However, the extent to which these characteristics are also important for motivational interviewing trainers remains uncertain.

What are the characteristics of good motivational interviewers?

There is growing interest in evidence about how people can be identified through characteristics, traits and pre-requisites as individuals that have the greatest potential to become effective motivational interviewers and trainers. The scan found scant empirical evidence about this topic.

Research suggests that empathy, communication skills and an affinity with the philosophy of motivational interviewing are important, but there is insufficient evidence to identify educational, professional role, personality or demographic traits that predict whether a professional will be an effective motivational interviewer.

There is some evidence that being a good role model in terms of healthy behaviours and having professional self efficacy may be important for those offering motivational interviewing to support healthy eating and physical activity.

However there is no evidence about whether some types of professionals are more effective at motivational interviewing than others and no evidence about whether age, gender, ethnicity, education level or other demographic factors influence the effectiveness of motivational interviewers or predict who can most successfully use this technique.

4.2 Ongoing research

There are a number of ongoing studies and registered trials in the US, UK, Europe and Australia examining the value of motivational interviewing as a tool for empowering patients and supporting self care.^{273–283}

Researchers, particularly in North America, also continue to explore the value of embedding training in motivational interviewing skills into the core curriculum of medical, nursing, dental and pharmacy students.

However, we found no information about ongoing studies or organisations that are actively focusing on the personal and professional characteristics of staff providing motivational interviewing or the characteristics or pre-requisites of those providing training.

There is growing interest in using information about the characteristics of trainers and trainees to make the selection and training of staff most effective. This research scan suggests that there is a real lack of knowledge in this area.

However, more is known about useful training approaches. As with teaching about other communication styles and interpersonal skills, training for motivational interviewing appears to be most effective when it begins early in professionals' careers, when it explores the philosophy underpinning the approach rather than merely seeing motivational interviewing as a technical skill or set of techniques, and when plenty of opportunity is provided for practice, feedback and ongoing improvement. Continual supervision and development once professionals are offering motivational interviewing in routine practice has also been found to be beneficial.

Motivational interviewing has the potential to support people to take more control of their health and their care and to help professionals feel more satisfied with the care they offer. The success of the technique may depend on the skills and characteristics of the professionals facilitating this approach and this research scan suggests that there is much more to be learned in this area.

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