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Effectiveness of training final-year undergraduate nutritionists in motivational interviewing

Trevor N. Simper[a,*], Jeff D. Breckon[b], Karen Kilner[b]

[a] Department of Food and Nutrition, Sheffield Hallam University, Sheffield, UK
[b] Centre for Health and Social Care Research, Sheffield Hallam University, Sheffield, UK

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ABSTRACT

Objectives: To assess the efficacy of a motivational interviewing (MI) training programme on trainee nutritionists.
Methods: A repeated measures design was applied to assess clinician behaviours in a 'helping' conversation. Participants were 32 nutrition students, assessed at baseline and one-month follow-up.
Results: The training significantly reduced the use of closed questions and MI non-adherent behaviours (MINA) (P for both = <0.001). Trainees significantly increased reflections, affirmations, summaries (P for all = <0.001) and the use of open questions (P = <0.013) which are all key indicators of MI beginner-competence. The talk-time ratio of the nutritionists also changed significantly, in favour of the client which serves as an indication of MI being used effectively. There were also significant increases in 'global' scores for empathy, direction, autonomy/support, collaboration and evocation.
Conclusions: Newly trained nutritionists 1 month post-training have a consultation style which suggested positive outcomes for clients. The trainees' scores at the one month post-training assessment were verifiable as 'beginning proficiency'.
Practice implications: Behaviour change counselling skills for nutritionists were enhanced, at one month post-training. MI training workshops with video feedback enhances communication skills which are likely to lead to positive consultation-behaviour changes in the trainee nutritionists.

1. Introduction

Many undergraduate nutrition courses do not include behaviour change counselling as a substantive and essential part of training [1]. This is despite the fact that enactment of public health messages for nutrition and lifestyle involves volitional behavioural adaptation. This research investigates the efficacy of motivational interviewing (MI) training for undergraduate trainee nutritionists. Although changes to student knowledge and confidence following MI training workshops are demonstrable, effects on behavioural change skills in this group are less clear. A pre/post analysis of trainee nutritionists' consultancy-approach is warranted.

1.1. Background to MI in clinical settings

Motivational Interviewing (MI) is an evidence-based collaborative approach for helping people change behaviour and has been demonstrated to be effective in exploring and managing individual's ambivalence about changing behaviour [2]. Originally formed by work and research in the addictions field [3], MI has become commonly applied in a variety of settings including healthcare [4,5]. Motivational Interviewing is both person-centred and directive, i.e. therapists listen for opportunities to elicit and strategically strengthen change talk (talk which expresses autonomy and commitment towards change) and consists of both relational (spirit/philosophy) and technical components. The spirit of MI includes evocation of resources and opportunities toward change, collaboration, acceptance of the individual's status, and compassion [2]. The technical, or micro-skills, used in the approach are commonly abbreviated as OARS (open ended questions, affirmations, reflections and summaries) and are used strategically to elicit and strengthen clients' change talk. For additional resources of the content and delivery of MI see Miller & Rollnick [2].

1.2. Training in MI

A common format for MI training is a short workshop – often 15 h and often delivered over 2-3 days; or less commonly several

* Corresponding author at: Room 7402b, Stoddart Building, Sheffield Hallam University, City Campus, Arundel Gate, South Yorkshire, S1 1WB, UK.
E-mail addresses: T.simper@shu.ac.uk (T.N. Simper), J.Breckon@shu.ac.uk (J.D. Breckon), K.Kilner@shu.ac.uk (K. Kilner).

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shorter sessions with or without coaching and feedback via audio or video recordings [8–10]. Although the efficacy of such training has been commented on positively in the training of counsellors in the drug/addiction field [10] further work is needed in other areas such as nutrition. MI has continued to expand into other healthcare professions (e.g. diet/nutrition, primary care and pharmacology for examples) [11–13] and with that expansion a greater number of workshops are being delivered by MI trainers. Miller and Mount [9] commented on the efficacy of a 2-day MI workshop in changing the practice of trained counsellors and the effects of this on their clients – essentially changes to clinicians' practice were often maintained at 4 months but this was not strong enough to make a difference to client behaviours. Miller and Mount further suggested the efficacy of such training may be improved by using individual coaching/feedback. Schwalbe and colleagues also agree with feedback increasing the strength of outcomes suggesting that a dose of 3–4 feedback sessions over a six month period to sustain skills post-training [8].

Training [in MI] seeks to enhance both the technical and relational components of the approach. A brief review of the philosophy and empirical base of MI training accompanies numerous exercises designed to practice the skills of MI alongside the encouragement of self-reflection and independent skill development (using tools provided by the trainer) between training sessions. This research aimed to assess the potential impact of short duration workshops (which are realistic and commonplace in the current health environment) when supplemented by ongoing coaching in sessions and video feedback.

Training often incorporates a combination of simulated patients, role- and real-play for the purpose of experiencing and then applying MI, and studies have explored the relative merits of each [15,16]. Poirier and colleagues argue for the efficacy of role play in increasing medical students' confidence in carrying out MI [17] although Miller and Mount [9] also suggest there is a disparity between learners' confidence in carrying out MI with the actual observed practice thereof. An initial stage for learning MI may be an increase in confidence around using skills but a subsequent danger is the learners deciding they have 'done' MI and therefore have no more need to learn, be observed by skilled practitioners or reflect further on their own practice [2].

1.3. Behaviour change training/counselling skills essential for nutritionists

Training in MI for higher education students has been assessed previously in a variety of settings including: kinesiologists [18] pharmacists [19] and medical students [17] none, to our knowledge, have used the proposed format of 15 h split into 5 sessions with video feedback. Training in behaviour change counselling is essential for undergraduate students of nutrition and yet lacking in course curricula where arguably the emphasis is on the bio-medical understanding of nutrition [1]. Information exchange alone may not be helpful in terms of long-term behaviour change where the autonomous decision rests with the patient/client and the nutritionist best serves as facilitator offering advice when a) it is asked for or b) they have clear explicit permission from the client to do so. In other areas of healthcare practice it has been demonstrated that short courses in communication skills can improve doctor-patient communication without adding time to consultations [21]. The imbalance between bio-medically important curriculum and behavioural change counselling training in nutrition needs attention. Bio-medically focussed professionals may find it easier to focus on bio-medicine than they do on the psycho-social areas needed for effective 'treatment' [22]. Where the patient's physiology is linked to their behaviour an understanding of psycho-physiology is needed, underpinned by evidence-based behavioural approaches to consultation [23]. In nutritionist training emphasis is in need of a shift so that more focus is placed upon the area of behaviour change skills rather than overly or only focussing on biological science [21–23].

The present investigation aims to answer the question: "What difference is there in behaviour change counselling competence between baseline and follow-up from 5 × 3 h training sessions and 1 session of video feedback?"

2. Methods

2.1. Study design and procedure

At baseline, it was identified that students were untrained in counselling methods and anecdotal observation of early workshop conversations clarified that a limited person-centred approach was taken in relation to the nutritional consultations, which were mostly: friendly, supportive, suggestive and based around sharing the knowledge the students had gained from two years of nutrition study.

MI training was delivered to 52 novice counsellors from a final year undergraduate nutrition cohort. Participants received 5 × 3 h face-to-face workshops on MI and were supported by one video coaching session with feedback (based on a recording of a trainee/client interaction recorded after the first 3 workshops). To help ensure fidelity of the training in the current study, the workshop was delivered by a member of the Motivational Interviewing Network of Trainers (MINT), the international organisation through which accredited training is offered.

2.2. MI training content

The aim of the training was to introduce trainees to the approach of MI, introduce practice and improve that practice as the workshops progressed. The training was conducted over the course of one semester in the final year of the student undergraduate nutrition degree. The baseline video assessment was conducted before any MI training had taken place and focussed on a 15 min session where trainees were instructed to have a helpful conversation with a client (an actor conversant with the approach of MI) seeking help around lifestyle (exercise, diet and alcohol). In the follow-up video assessment trainees were instructed to employ OARS and avoid MI non-adherent behaviour, in the way they had practised throughout the workshops, using a nutritional consultation with the same actor and again focussing on one of the lifestyle issues above. A video was also made at the end of the first 3 workshops (i.e. after 9 h of training). The recording was followed by students reviewing their own recording and submitting their reflections to the trainer who simultaneously recorded his reflections on the students' performance and exchanged feedback. Following this a further 6 h of training was carried out to complete the training which was followed one month later by a follow-up assessment with an actor. Students received a total of 15 h of workshops plus the video feedback from the trainer. Students also had access to a 'Blackboard' site- a web based application containing materials, audio and video recordings used in the workshops.

The 5 × 3 h workshops were broken down into introducing the spirit and technical aspects (OARS) of MI with continuous practice, observation and modelling of the skills via key exercises described fully elsewhere [24,25] using audio, video and real-play demonstration alongside the trainees completing real-play exercises and receiving continuous feedback from the trainer. The split between didactic delivery and experiential/feedback on performance of MI skills throughout the workshops was 40:60 in favour of the experiential/feedback.

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