Use of Motivational Interviewing by Non-Clinicians in Non-Clinical Settings

PeopleScape

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Executive Summary

Purpose

Motivational Interviewing (MI) is a collaborative, person-centred approach to motivating positive behaviour change. In contrast to other more coercive approaches to behaviour change (e.g., telling, advice giving), the goal of MI is to elicit and reinforce an individual's own motivation to change. The purpose of this review was to investigate whether MI can be used by non-clinicians to influence positive behaviour change in non-clinical settings, such as the Return to Work (RTW) setting. The question was broken into two parts, namely:

(1) Can non-clinicians effectively learn and apply MI skills?
(2) Can the application of MI techniques help to facilitate behaviour change in non-clinical settings?

Method

Relevant peer reviewed literature was sourced from (1) various medical, health and social research databases, (2) reference lists of acquired papers, (3) an extensive online MI bibliography and (4) personal peer networks. Search terms included: return to work, rehabilitation, work injury, vocational counselling, employment, and 'motivational interviewing'. Only empirical papers that included non-clinicians as MI practitioners (i.e., vocational counsellors, physicians, and nurses) or applied MI in a non-clinical setting were reviewed. Only a limited number of studies met these criteria.

Summary of Findings

Results suggest that non-clinicians can effectively learn MI skills. However, only one subgroup of practitioners (vocational rehabilitation counsellors) was from a non-health background. Current evidence suggests that when practitioners deviate from standard MI methods, they may be less effective. Thus, it is critical that those learning MI techniques do so thoroughly, and with the appropriate supervision and follow-up.

Based on limited available evidence, mixed support was found for the use of MI in non-clinical settings. Much of this evidence was from the vocational rehabilitation field. Although individuals in this context are typically seeking new work rather than re-engaging with their current employer, there are a number of parallels that makes this research relevant to the current context. Interventions in the work setting may be most effective when used in combination with a behaviour change model, such as the Transtheoretical Model of Change, to help tailor the approach.

Conclusions and Recommendations

Caution needs to be applied when interpreting the results due to the limited number of studies available on this topic. None of the studies explicitly tested the use of MI in returning a worker to the same workplace within which they became ill or injured, which may create additional hurdles to successful RTW. Whilst there is clearly a need for greater research in this area, results are encouraging, and cautious optimism is suggested for the use of MI in a RTW context.

Background

Worker disability as a result of experiencing injury or illness is associated with significant economic, social and health-related burdens, particularly when Return To Work (RTW) is delayed (MacKenzie et al., 1998). Evidence suggests that work-based RTW interventions can help to reduce the duration and cost of work disability, and in turn, prevent the negative effects of long-term sickness absence (Black, 2008; Franche, 2005). In a review of 10 studies undertaken between 1990 and 2003 regarding worker disability for musculoskeletal conditions and other pain disorders, Franche and colleagues (2005) found strong evidence to suggest that helping to accommodate worker's injuries through changes to work, and maintaining contact with the injured worker's health provider can improve RTW outcomes and associated costs. Outcomes can also be improved when workplaces initiate early contact with ill or injured workers, provide ergonomic worksite visits, and a RTW coordinator (moderate support).

Supporting workers to return to work as soon as it is healthy and safe to do so after injury can also play an important role in the recovery process (Black, 2008). Indeed, individuals who are able to successfully RTW, in some capacity, after an injury or illness report significantly greater life satisfaction and subjective wellbeing than those who have not been able to re-engage in employment (Vestling, 2003). However, there are a number of complex cognitive, affective and behavioural factors that can impact an individual's confidence, motivation and willingness to RTW (Magnussen, 2007; Waddell & Burton, 2005). These factors need to be addressed and overcome in order to support workers to return to work quickly and safely.

Motivational Interviewing (MI) is an empirically validated approach or 'way of being' with a client that has shown to be useful in situations where a person may be ambivalent about changing their behaviour (W. R. Miller & Rollnick, 2002). Whilst typically used to motivate health behaviour change (e.g., alcohol abuse, increasing exercise, smoking cessation), there is also a small, but growing evidence base for the effectiveness of MI in other settings including work-related contexts (Butterworth, Linden, McClay, & Leo, 2006; Larson, 2007).

Research Question

WorkSafe would like to explore the utility of Motivational Interviewing (MI) for use in improving RTW outcomes, because of its success in encouraging positive behaviour change across a diverse range of problem areas (Dunn, 2001; Hettema, 2005; Rubak, 2005).

This rapid review explores evidence for the use of MI in non-clinical settings, such as the workplace, and specifically, whether the use of MI techniques by non-clinicians can facilitate positive changes in thinking and behaviour amongst individuals in an employment context (e.g., returning to work after injury or illness).

The information contained in this report may assist WorkSafe to make an informed decision about the development and/or incorporation of MI tools and techniques in training and support materials for both employers and Agent staff, in order to positively impact worker behaviour and RTW outcomes. In turn, this may assist

WorkSafe to reach its RTW targets as well as improve the service provided to injured workers by RTW Coordinators and Agents.

PeopleScape, through ISCRR, was commissioned to undertake a rapid review of available evidence to investigate whether motivational interviewing can be used by non-clinicians to influence positive behaviour change in non-clinical settings. For the purpose of this review, this question was broken into two parts, namely:

1. Can non-clinicians effectively learn and apply MI skills? For the purpose of this review, non-clinicians were defined as those whose roles do not routinely involve psychological or therapeutic skills (e.g., vocational counsellors, doctors, nurses); and

2. Can the application of MI techniques help to facilitate behaviour change in non-clinical settings? In particular, articles were sought that referred specifically to improved return to work and employment outcomes for injured or disabled workers (both physical and psychological).

Method

First, relevant peer reviewed literature, dating between 1990 and 2012, were sourced from various medical, health and social research databases through the University of Melbourne's online database tool (EBSCOHost, PsycINFO. Medline, PubMed). The search was expanded by scanning the reference list of each paper for potentially relevant papers. As a third step, the extensive MI bibliography published on the MI website[1] was reviewed to identify other relevant articles. Finally, given the specialised nature of the research questions, and difficulty in sourcing literature through standard channels, personal peer networks of the author were utilised to seek out any additional literature, including unpublished research, practitioner research and research that had appeared in obscure journals.

The search terms used included: return to work, rehabilitation, work-related injury, work injury, vocational counselling, employment, in combination with the term 'motivational interviewing'. Only empirical papers that included either non-clinicians as MI practitioners (i.e., vocational counsellors, physicians, nurses, dieticians, health promotion officers) or applied MI in a non-clinical setting (e.g., vocational counselling) were reviewed.

Motivational Interviewing

Motivational Interviewing is a collaborative, person-centred approach to motivating positive behaviour change (W. R. Miller & Rollnick, 2002; W.R. Miller & Rose, 2009). MI was first developed for use to treat substance abuse in the 1980s by clinicians and therapists. It is now used by a diverse range of practitioners to facilitate lifestyle changes and improve treatment adherence for a number of health problems including obesity, HIV, cardiac rehabilitation and mental health disorders (Armstrong et al., 2011; Britt, 2003; Dunn, 2001; Soderlund, Madson, Rubak, & Nilsen, 2011). In contrast to other more coercive and externally motivated approaches to behaviour change (e.g., telling, advice giving, arguing, directing), the goal of MI is to elicit and

[1] http://motivationalinterview.org/library/biblio.html

reinforce an individual's own motivation to change. This is achieved through a process of reflective questioning and active listening which helps an individual to see how changing their behaviour would allow them to achieve important life goals. These core MI techniques are guided by the underlying 'spirit' of MI which involves:

1. *Collaboration*: Working with a client in a non-confrontational manner, where the recipient's perspective (rather than the practitioner's) is held paramount.

2. *Evocation*: Change is elicited from within, drawing on the individual's own resources and expertise, as opposed to the client being 'educated' by the practitioner.

3. *Autonomy*: The client is seen as their own best expert and encouraged to make decisions and take action in an independent and self-directed manner (W. R. Miller & Rollnick, 2002; W.R. Miller & Rose, 2009).

MI focuses in particular on understanding and resolving a person's ambivalence towards change, acknowledging that ambivalence is a normal part of the change process. The role of the MI practitioner is to work with rather than against a client's resistance to change and, in turn, strengthen the client's confidence, readiness, and commitment to take positive action. In so doing, change is elicited in a way that aligns with the person's own values and goals and desires, rather than the values, goals or desires of others.

Reinforcing a client's natural strengths and resources, whilst respecting self-determination plays a key role in the MI process (William R Miller & Rollnick, 2012; Resnicow & McMaster, 2012). This is achieved by:

- Exploring client goals and values;
- Reinforcing the client's motivation to achieve these goals and values;
- Determining how the client's current behaviour is congruous or incongruous with their goals and values; and finally,
- Developing a change plan that aligns with the client's own desires and preferences and enables the individual to live in a more value-congruent manner (Manthey et al., 2011).

Several systematic reviews have shown MI to be an effective treatment modality in clinical settings in relation to a broad range of target behaviours such as alcohol, smoking, eating disorders, HIV/AIDS, treatment compliance, diet and exercise and gambling , generally with low to moderate effect sizes (Hettema, 2005; Rubak, 2005; Soderlund, et al., 2011). In a review of 72 studies, Hettema and colleagues (2005) found 53% (38) of the studies reviewed indicated positive results for MI. Positive effects were not dependent on the purity of training (i.e., MI alone or MI in addition to other treatment) or on the targeted problem area. The effect of MI was significantly larger for minority groups. MI effects were found to gradually decrease over time for all groups.

In another meta-analysis, Rubak et al (2005) found that MI outperformed traditional advice giving in around 80% of cases. MI was equally effective in the treatment of both psychological and physical diseases. Success was more likely when the

practitioner had ongoing involvement with an individual; however, brief, one-off encounters (around 15 minutes) led to positive results in 64% of cases.

More recently, Lundahl (2010) conducted a meta-analysis of 119 studies. Half of the studies reviewed showed small but significant effects, 25% showed neutral or negative effects and 25% were larger than a medium effect. These effects varied substantially according to participant and study features. Specifically, effect sizes were in the low to moderate range when compared with weak comparison groups, and non-significant effects when compared to specific treatments. In contrast to Hettema et al. (2005), effects were not dependent on whether or not MI was delivered according to a set manual. They also did not depend on the format or role of MI in the treatment process, fidelity to MI, or the type of practitioner applying MI techniques. The outcomes most improved through application of MI principles were engagement in the treatment process and client's intention and motivation to change.

Research to date suggests that MI has the potential to positively impact behaviour change in a multitude of settings. Given the focus of MI is on working with clients who may be resistant or ambivalent towards change, and that motivation plays an important role in the RTW process (Waddell & Burton, 2005), MI techniques may also be effective in the complex RTW context. For example, Lloyd et al (2008) suggested MI could be used to help workers to explore such things as the overall value and benefit of a worker maintaining/ re-engaging in employment, the potential of integrating work into the worker's personal recovery goals, concerns or fears about employment, whilst also tapping into an individual's personal sources of motivation and helping them to develop positive RTW expectations.

The Transtheoretical Model of Change suggests that people cycle through a series of stages before making change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992), including:

- Pre-contemplation, where an individual is not aware of a need for change and is therefore resistant to change;
- Contemplation, where individuals are aware for a need for change but are still somewhat resistant;
- Preparation, where individuals are ready to change and start planning for action;
- Action, where an individual undertakes different behaviours to achieve their change goal; and finally,
- Maintenance stage, where the behaviours are being maintained. Relapse can also occur at this stage (as well as others).

MI can be usefully applied to help a client to move from pre-contemplation to the contemplation and preparation stages of change, thus increasing the likelihood of action; although the two do not necessarily need to be used hand-in-hand and should not be confused (W. R. Miller & Rollnick, 2009).

Findings

Research Question 1: Can non-clinicians effectively learn and apply MI skills?

There is evidence in the literature to suggest that MI skills can be learnt and effectively applied by non-clinicians for a range of problem areas (Hettema, 2005; Rubak, 2005). For example, Rubak et al's (2005) meta-analysis, discussed earlier, found that the positive outcomes achieved in 80% of the MI studies reviewed were not dependent on the practitioner's background and education when comparing psychologists and psychiatrists with physicians. Success was also found in 46% of studies involving other health practitioners (e.g., nurses, midwives, dieticians) although the authors suggested that the lower success rates may have been due to study design and target population (e.g., more resistant groups of people).

In the studies reviewed, non-clinicians typically included doctors, nurses, midwives, health promotion officers, students (e.g. medical), and vocational counsellors. Indeed, the use of MI by primary health care professionals other than psychologists/therapists, and in particular, general practitioners, is becoming increasingly common practice as well as an area of medical student training (Addo, Maiden, & Ehrenthal, 2010; Opheim, Andreasson, Eklund, & Prescott, 2009). There have also been calls for MI to be included as a core evidence-based practice area in vocational rehabilitation (Fraser, 2004; Manthey, 2009).

It should be noted that training practitioners to effectively apply MI techniques across the field (clinicians as well as non-clinicians) remains a challenge for the field and is the focus of current research (e.g., Gibbons et al., 2010; W.R Miller, Yahne, Moyers, Martinez, & Pirritano, 2004). In particular, it is important that practitioners are able to apply the techniques competently and adhere to the core principles of MI (Gibbons, et al., 2010). Indeed, Apodaca and Longabaugh (2009) found that MI-Inconsistent behaviour on behalf of practitioners reduced outcome effectiveness. However, initial evidence, at least with clinicians (although not necessarily psychologists) suggests that a 2-day interactive workshop, followed by ongoing coaching and supervision, is the most effective way to train practitioners (W.R Miller, et al., 2004).

Research Question 2: Can the application of MI techniques help to facilitate behaviour change in non-clinical settings?

Only a small number of studies were found that looked at MI in other, non-clinical domains. These included: motivating "fringe" clients to find employment (Muscat (Muscat, 2005); reducing the risk of criminal reoffending (Anstiss, 2011); employee coaching (Passmore, 2011); and supporting people with mental and physical health problems to return to employment (Lloyd, 2008). Unfortunately, very few of these papers were empirical. However, they did provide useful rationalizations as to how and why MI should be implemented in other domains and thus are referred to at various points throughout this review.

Only five studies empirically examined the use of MI in a non-clinical domain. These papers differed considerably in terms of focus and outcome, but all included MI as part of an integrated intervention that was delivered either with working populations or with individuals that were injured or ill, with the expressed aim of returning these individuals to employment. One additional study looked at how MI could be used to

reduce the risk of criminal re-offending. None of these studies were conducted in Australia. Each study is examined here in detail.

MI-based Health Coaching

Butterworth and colleagues (2006) investigated whether MI-based health coaching could be used to reduce health risks in a sample of 276 medical centre employees as part of its Employee Wellness Program in the United States. 145 participants self-selected into the intervention group and 131 into the control group. Participants in the former group received three, 30-minute health coaching sessions with trained health professionals (non-specified). Health issues targeted by the coaching included weight loss, stress, exercise and nutrition.

The authors reported significant increases in both self-rated physical and mental health, as measured by the Short Form 12 Health Survey, amongst intervention participants relative to controls. Unfortunately, however, the study did not assess specific changes in employee behaviour that may have contributed to these results.

MI as part of an Integrated Health and Employment Program

In another study conducted in the United States, this time focusing specifically on employment outcomes, Bohman and colleagues (2011) investigated whether provision of comprehensive health and employment supports, including MI, could help workers with a high risk of disability through chronic physical or mental health problems maintain their employment status. Individuals were randomly assigned to either an intervention (n=904) or a control (n=712) group. Around 11% had a serious mental health condition. The remaining 89% had other behavioural issues, such as non-clinical depression in addition to a chronic physical health condition (e.g., heart disease, diabetes). Intervention participants received tailored case management services including goal setting, planning, advocacy, health education and connection to health and employment resources. Each employee was in contact with a case manager, around 1-2 times per month, who worked to build their confidence and motivation through the utilization of MI principles. Case managers were typically nurses, social workers or vocational specialists.

Participants reported a number of benefits including better access to care and medical visits, and a lower likelihood of receiving social benefits. Contrary to hypotheses, there was no difference between the intervention and control group in terms of hours worked or unemployment. Unfortunately, the integrative approach used here makes it hard to determine whether or not more positive behaviour changes would have been achieved through a more focused MI approach. This may have been particularly helpful for those individuals who were not yet ready to change.

MI and the Stages of Change Model

Larson and colleagues (2007) applied MI specifically to individuals in the pre-contemplation, contemplation and relapse phases of the Transtheoretical or Stages of Change Model (Prochaska & DiClemente, 1983; Prochaska, et al., 1992) with the objective of moving individuals towards greater readiness to change.

The focus of this latter study, conducted in the United States, was to assess the impact of an individual placement and support program, integrated with MI on individuals with severe psychiatric disabilities. The goal of the study was to help such individuals to both seek and secure potential employment. Employment specialists utilized MI techniques to help individuals overcome resistance and resolve gaps between words and behaviour. Interventions were tailored towards an individual's stages of change (i.e., pre-contemplation, contemplation, determination, action, maintenance and relapse). The 125 individuals were tracked over six months.

Positive effects of the program were found for number of jobs obtained by individuals, number of hours worked per week, hourly wage, and the total income earned per month. Stage of change was positively related to job outcomes – that is, the more ready individuals were to find employment, the more likely that they were to achieve positive outcomes. Although this study did not involve a comparison group, results are encouraging that a blended vocational program can improve work-related outcomes.

Similar results were found by Anstiss (2011) in New Zealand, this time investigating the application of MI to 58 male criminal offenders to increase their motivation to engage in behaviour that reduced their likelihood of reoffending. In this study, however, all participants received a brief MI intervention (MI only), regardless of their stage of change, with the goal of motivating prisoners to engage in a formal rehabilitation program. As with Larson et al (2007), MI was shown to be useful in motivating individuals (male offenders) towards increased readiness for change (on average one stage forward in the Stages of Change model). Stage of change, in turn, predicted reconviction outcomes.

Vocational Rehabilitation Programs, MI and RTW

Finally, in a Norwegian study, Magnussen and colleagues (2007) looked at whether a brief vocational program could support workers with chronic low back pain to RTW. Eighty-nine individuals who had been off work and receiving disability benefits for at least one year were assigned to an integrated set of activities designed to address a number of psychological and social barriers to work. Activities included information/education to reduce limiting beliefs about work (e.g., fear/avoidance of work due to injury) plus three hours of MI. At a one-year follow-up, twice as many individuals in the intervention (n=45) group, compared to the control (n=44) group, were engaged in some work although this difference was not significant; possibly due to limitations in statistical power. Further, only 18% of participants had believed prior to entering the intervention that they would be able to successfully RTW one day, suggesting the group may have been highly resistant to change and/or facing major barriers to re-employment, thus limiting the possibility of success. In support of this, the authors found that individuals with positive expectations, reduced pain and better physical functioning were more likely to successfully RTW in the study.

Discussion

The aim of this review was to assess whether the use of MI techniques by non-clinicians can motivate positive behaviour change in a non-clinical setting, such as the workplace. We found good support for the first part of the question – i.e., that non-clinicians can effectively learn MI skills. However, only one subgroup of

practitioners (vocational rehabilitation counsellors) was from a non-health background. There may be some gain in the use of MI skills by people who do not have a therapeutic background in that they may be less likely to revert to 'tried and true methods'. In a qualitative study of the training experiences of 20 Swedish nurses, for example, Soderland, Nilsen and Kristensson (2008) reported that nurses often found it difficult to replace traditional authoritarian styles of interacting with patients to the more collaborative, person-centred MI style. Current evidence suggests that when practitioners deviate from 'pure' MI methods, they are able to achieve less successful outcomes. Thus, it is critical that those learning MI techniques do so thoroughly, and with appropriate supervision and follow-up (W.R Miller, et al., 2004; Smith et al., 2007).

We found mixed support for the use of MI in non-clinical settings amongst a very limited number of studies. Of the evidence found, most was from the vocational rehabilitation field. Vocational counsellors typically support people with significant disabilities, including physical and psychological health problems, to gain re-employment. Workers who have been out of the workforce for long periods of time due to chronic health conditions, such as low back pain and depression, typically experience a number of biological, social and psychological barriers to work, including pain, fear avoidance, lack of confidence and low social support (Fraser, 2004; Lloyd, 2008; Manthey, 2009). In order to successfully return such people to work, vocational counsellors must first help to identify and address these factors. Although individuals in this context are typically seeking new work rather than re-engaging with the current place of employment, there are clearly a number of parallels that makes this research relevant. Indeed, Black (2008) reported that 55% of people on long-term unemployment benefits came from work or a period of absence from work due to illness. Intervening earlier through workplace RTW interventions would be a more upstream and preventative approach to long-term work absence and/or incapacity to work.

The mixed findings presented in this review may be due to the difficult populations investigated (generally those with chronic psychological and physical health conditions), and also the fact that MI was generally fused with several other interventions, which may have diluted the effect. Although there is evidence that MI can work very well when used in combination with other techniques or as a pre-intervention to improve treatment adherence, this may not be true in a non-clinical setting such as the workplace where approaches are often not as structured as treatment provision. Further, it may be that MI is best applied in a tailored fashion – for example, as a pre-treatment measure or tailored to a person's readiness for change, as was found in the studies of both Larson (2007) and Anstiss (2011). MI is generally considered to work best with individuals who are stuck or resistant to change. This might be particularly true in a work setting, and particularly when an individual does not enjoy their job, or is working in a poor psychosocial work environment (e.g., Krause, 2001). For example, Krause and colleagues (2001) found employees with poor supervisory support and high job demands were less likely to return successfully to work (20% less likely) whilst those with high levels of control over their work and rest periods were more like to RTW (30% increase). These effects were independent of the severity of injury and physical workload.

Conclusion/Recommendations

Although studies on the use of MI in a RTW context are limited, at this stage evidence suggests that employees working in the RTW space could benefit from MI training with the explicit aim of improving RTW outcomes. However, some caveats would need to be applied including the importance of:

1. Training practitioners effectively, including providing of follow-up coaching and support;

2. Practitioners maintaining fidelity to the MI approach in order to achieve effective outcomes;

3. Considering a worker's readiness for change, and particularly using MI as a way of supporting a worker through the stages of change; and

4. Ensuring workers do not see MI as a way of 'tricking' them (W. R. Miller & Rollnick, 2009) into RTW, particularly if a person is not ready, and/or the individual is exposed to a poor psychosocial work environment (Krause, 2001; W. R. Miller & Rollnick, 2009).

Building on the recommendations by Lloyd et al (2008), some areas where MI could be of help would be to help individuals to explore the role of work (or non-work) in their recovery process; identifying and addressing barriers to RTW; encouraging injured workers to stay in touch with workmates/ manager; adhering to specified RTW and treatment plan; and finally gradually transitioning back into the work environment, when it is safe and appropriate to do so.

The limited studies available for this review means that caution should be applied when interpreting the results. It also suggests an obvious need for further research in this area. In particular, research needs to explicitly test the use of MI in returning a worker to the same workplace within which they may have become ill/ injured. Certainly this would bring up additional hurdles that may need to be overcome (e.g., poor supervisor support). Some of these factors may be beyond the influence of MI.

Overall however, the strong body of evidence sitting behind the MI approach in general, and some encouraging evidence regarding the use of MI in a work setting, suggests that this is an important area for future recovery research and practice.

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