University of Southampton

Doctoral Programme in Educational Psychology

Title: Motivational Interviewing

Author: Muireann McSwiney

Date submitted: June 2012

Case background, referral question and enquiry method

Omar is a boy in Year 10 who came to the attention of the Educational Psychology Service (EPS) in February 2012 due to the school's concerns regarding deterioration in his attendance, engagement and motivation for learning over the last two years. Omar's relationship with his father and his father's side of the family had broken down in July 2010 and Omar's mother was concerned about the effect that this had had on Omar. The school had suspicions that Omar was using drugs and Omar's mother confirmed that this was the case. Omar frequently came to school late, truanted in the afternoons or had full days of unauthorised absence. Omar's rate of attendance between September 2011 and March 2012 was 82%. When in school, he appeared disengaged, participated in low-level disruption and was felt to be underachieving.

When I first met with Omar (08.03.2012), he told me that he smoked cannabis approximately 3-4 times a week, smoked about ten cigarettes a day and used other illicit substances ('legal highs', speed, ecstasy) at the weekend. He said that he had started drinking and using drugs around the same time that "things with my dad got really bad". Omar presented as a friendly and streetwise individual who readily engaged with me and was very forthcoming with information. He became very upset when discussing his relationship with his father and appeared to be quite analytical, liking to talk and reflect. During our initial meeting, Omar expressed a desire to reduce his substance misuse and to do better at school.

Intervention

Motivation and emotion are tightly intertwined so it was not surprising that the problems at school and initiation of substance misuse coincided with the breakdown in Omar's relationship with his father. Developmentally, this coincided with a time when a lot of adolescents experiment with substances as a means of achieving social belonging and asserting autonomy and a more 'mature' identity.

Omar's poor attendance, low motivation to learn and general disengagement were felt to be heavily influenced by his misuse of substances. Thus, to increase his engagement and wellbeing, I felt that targeting his drug use through motivational interviewing (MI) was appropriate. MI explores and resolves ambivalence in a supportive and client-centred relationship to elicit change. Omar had himself identified smoking as a habit he wanted to quit, expressed ambivalence about misusing illicit substances but felt that he wanted to continue smoking cannabis. I also chose MI because of its documented appropriateness to substance misuse and the spirit of respecting clients' values and autonomy making it particularly suitable for adolescents (Naar-King, 2011).

Outcomes

At the review meeting (03.05.2012), the head of year said that Omar's engagement in class and attendance had improved since the start of my involvement. However, Omar's self-reported drug use was unchanged and in discussing this with Omar, it was evident that he was still very much in the 'pre-contemplation' stage of change (of the transtheoretical model of change, TTM; Prochaska and DiClemente, 1992). The Easter break had occurred during the middle of my involvement which may have disrupted the 'momentum' of the change process. In discussing the case with my supervision co-ordinator, it was felt appropriate to refer Omar for specialist drug support and counselling.

Review and appraisal of literature related to the case

People who misuse substances are often ambivalent about changing their behaviour and may perceive a number of associated benefits (Britton, Patrick, Wenzel & Williams, 2011), thereby minimizing motivation to change. MI was originally developed for alcohol misuse (Miller, Benefield & Tonigan, 1993) and it "integrates the relationship- building principles of humanistic therapy with more active strategies targeted to the client's stage of

change" (Burke, 2011, p. 74). The practitioner does not assume an 'expert' or 'authoritarian' stance and respects the client's decision whether to change or not.

MI consists of affirming the client's ability to make changes (supporting self-efficacy); listening to the client's perspective without judging or criticising (expressing empathy); developing the client's awareness of the disparity between their goals and values and their current behaviour (developing discrepancy); and avoiding arguing with clients or confronting irrational or incorrect statements (rolling with resistance). In developing discrepancy, cognitive dissonance results and the MI practitioner uses MI techniques to control the direction of the dissonance resolution in favour of change (Britt et al., 2008).

MI has been criticised for lacking a theoretical foundation (Draycott & Dabbs, 1998) instead it arose from "specification of principles underlying intuitive clinical practice" (Hettema, Steele & Miller, 2005, p.106). But in accordance with self-determination theory (Deci and Ryan, 2002), MI can be said to improve motivation through its focus on personal autonomy and supporting human needs for relatedness and competence. A key goal of MI is to elicit 'change talk' (CT; Amrhein, Miller, Yahne, Palmer & Fulcher, 2003) using open-ended questions, affirmation, reflective listening and summarising ('OARS'). CT are client expressions indicating optimism regarding change, benefits associated with change or dissatisfaction with the behaviour under scrutiny (Miller & Rollnick, 2002). Self-perception theory (Bem, 1972) suggests that people determine how they feel about an issue by listening to themselves, "thus people can literally talk themselves out of or into behaviour change". Indeed, Miller & Rollnick (2002) suggest that client language is one of the key mechanisms of change and Hettema et al. (2005) argue that it is a vital aspect of MI's 'emergent theory'. Although little is known about MI mechanisms, most research has been concerned with assessing outcomes rather than the processes involved (Allsop, 2007).

Jensen et al. (2011) conducted a meta-analysis of twenty-one MI interventions for adolescent substance misuse. Only five of these studies reported treatment fidelity data and most studies (13) comprised just a single session of MI (others ranged from 2-9 sessions). Jensen et al (2011) found that studies that addressed tobacco use yielded significant, medium effect sizes (mean d=0.305) whilst MI for alcohol and other substance misuse yielded smaller, but significant, effect sizes (mean d=0.146). However, results can reflect the nature of evaluation measures used rather than impact of MI (Topping & Ehly 1998).

Much of the MI research has been done with small, self-selected samples with minimal follow-up and implementation integrity data (Martins & McNeill, 2009). Conflicting research findings make it difficult to determine which processes and elements are crucial to MI fidelity (Allsop, 2007) and studies that claim to measure treatment fidelity may not in fact do so validly or reliably e.g. asking clients and therapists to rate MI constructs on a Likert scale after each session (Colby et al., 2005). Even though one may suspect that use of a manual would increase treatment fidelity, it may disrupt the natural process of MI, distracting practitioners from focusing on the client (Miller & Rollnick, 2004). Thus, measures to ensure fidelity may compromise the efficacy of the intervention. Self-selected samples may have greater motivation to engage with MI which prevents accurate assessment of MI-specific effects. Given that MI targets motivation specifically, the motivational implications of sampling bias are especially pertinent.

McCambridge, Day, Thomas & Strang (2011) used a random sample of 75 adolescents to examine whether treatment fidelity in a single session of MI was positively correlated with cannabis cessation (defined as no use within the previous 30 days) at 3 month follow-up. The Motivational Interviewing Treatment Integrity scale (MITI) was used to assess treatment integrity. The MITI assesses MI ‘spirit’ (“the extent to which a practitioner

has a collaborative style, evokes the use of personal reasons for change and supports autonomy"(McCambridge et al., p.751); and therapist behaviours such as open questioning and reflections. They found that MI spirit and the proportion of complex reflections were predictive of cannabis cessation 3 months after one single session of MI. Neither of these elements are 'unique' to MI however and the MITI has not been extensively validated. The correlational design does not allow for causal conclusions and the authors highlight the importance of considering the very interactive nature of the therapeutic relationship. They suggest that perhaps those clients that were more likely to have chances of success anyway (the 'more engaged' or 'ready tochange') elicited a greater MI 'spirit' and complex reflections from practitioners.

As emotion and motivation are strongly related, it is surprising that so few studies examining MI included measures of depression, anxiety or wellbeing. One exception was a study by Colby et al. (2012). They also acknowledged that parents exert potentially significant distal influence on adolescent tobacco use (Huver, Engels & de Vries, 2006) and involved parents in the intervention-a distinct deviation from 'pure' MI. They compared 'enhanced MI' (a once-off MI session, followed by telephone booster session 1 week later and a 15-20 minute parent intervention over the phone) with brief advice (BA) in a self-selected sample (n=162) of adolescent smokers. BA constituted "strong directive advice to quit smoking as soon as possible" p819 and was delivered in just five-minutes whereas MI was delivered in 45 mins (a strikingly unequal intervention dosage). Both interventions were administered using a manual. Motivation to quit smoking and quitting self-efficacy were assessed by asking two separate questions rated on Likert scales. Baseline nicotine-dependence was also measured. Notably, they administered the Centre for Epidemiological studies depression scale (CES-D, Radloff, 1991) to measure depressive symptoms and self-reported tobacco use was biochemically verified via saliva and carbon monoxide sampling.

Declines in self-reported smoking were greater for MI than BA at 1 month follow-up but the biochemical measures suggested otherwise. There was no difference in rates of abstinence between the MI and the BA group. Nor was there any effect found for MI on either self-efficacy or motivation to quit smoking. The authors suggest that as both groups had reportedly high motivation to quit at baseline, perhaps lack of motivational increase is attributable to a 'ceiling effect'. The non-significant results may also be due to the intervention 'dosage' or duration not being sufficient to test MI effects. Lundahl, Kunz, Tollefson, Brownell & Burke's meta-analysis (2010) suggests that there is a 'dose effect' of MI so these 'once-off' interventions are likely to yield much smaller effect sizes and non-significant results.

An earlier study by Colby et al. (2005) found that abstinence rates did not differ between MI and BA intervention groups at 1 or 3 months but at 6 months, the MI group reported greater abstinence rates. Again, using biochemical measures over half of these 'abstinent' MI participants were reclassified as smokers. The authors underscore the necessity of using biochemical verification to confirm self-report substance use data. It is important to note that financial incentives were used in recruitment for Colby et al's 2005 and 2012 studies which likely biased self-reported ratings in favour of MI due to demand characteristics. Also, money has a well-documented, detrimental impact on intrinsic motivation (e.g. Lepper, Greene & Nisbett, 1973), thereby potentially jeopardising the benefits of MI for participants and skewing results.

Given that MI was created to improve readiness to change, it is remarkable that few studies measured stage of change (Prochaska & DiClemente, 1992). Of those that did, measures tended to be non-validated and idiosyncratic, yielding non-significant results (e.g. Apodaca & Longabaugh 2009). Audrain McGovern et al. (2011) used the 'Staging to Assess Readiness to Cut Back and Quit Smoking' questionnaire and compared five sessions of MI

with five sessions of structured brief advice (SBA). Adolescents (n=335) of varying levels of nicotine dependence were randomly allocated to either SBA or MI. The MI was based on an alteration of motivational interviewing (AMI) which incorporated personalised feedback regarding tobacco use and tolerance results. Any design that involves feedback is not studying 'pure' MI. Feedback may exert an independent effect (Vader, Walters, Prabhu, Houck, & Field, 2010) and has the potential to convey judgment which goes against MI principles. Peer and family substance use; depression symptoms (using the CES-D); treatment integrity; and previous smoking experiences were also assessed. Again, participants were paid for each of the 5 sessions. They found that MI participants were approximately 60% less likely than the SBA sample to try to quit smoking but had a 40% greater reduction in daily tobacco use. The authors suggest that these findings may reflect the nature of the interventions: SBA involved advice on quitting rather than reducing and MI focused on changing smoking behaviour. They propose that MI may be more successful at moving adolescents along the 'continuum of change'.

Author affiliation is an oft-cited source of potential bias and "studies conducted in the clinic of the founder of motivational interviewing (W. R. Miller) produced higher effect sizes, on average, than studies conducted elsewhere" (Burke, Arkowitz & Menchola, 2003, p857). Two possible explanations are suggested:

"(a) effect sizes may have been inflated in Miller's clinic because of investigator allegiance effects (Luborsky et al., 1999) and/or (b) the superior quality of motivational interviewing training and supervision, as well as ongoing integrity checks, available at Miller's clinic may have resulted in better AMI treatments and hence larger effects" (p. 857).

Evaluation of the literature is hindered by the differing conceptualizations of MI. A consistent definition of MI would allow for better meta-analyses and research so that treatment integrity, formulation of hypotheses and understanding of MI mechanisms may be

improved (Allsop, 2007). Perhaps as a result, studies have tended to focus on AMIs (Burke et al., 2003) making it difficult to isolate the 'active ingredient' in MI (Martins & McNeill, 2009).

Appraisal of literature relating to the case process

I think that a key strength of MI is its egalitarian, non-confrontational approach which was especially suited to Omar as he valued personal choice and autonomy very highly. Miller & Rollnick (2002) suggest that the therapist-client relationship is particularly important: "the quality of interaction between client and worker is the dynamic of change towards agreed ends" (p84, Strang & McCambridge, 2004).Omar reportedly enjoyed the sessions with me and I felt that I had succeeded in conveying empathy and acceptance. However, I am cognisant of the fact that my self-reported therapeutic relationship is by no means definitive. I am unsure as to how much of the improvement in Omar's attendance and engagement at school was due to the therapeutic relationship, or indeed factors such as passage of time or nearing the end of the academic year. Also, he had weekly sessions with me but the remainder of his time was spent in close relationships with people that reportedly condoned or encouraged his drug use. Significant others' habits can impact intrinsic motivation to change (Miller & Rollnick, 2002).

It is worth noting that I did not use 'pure' MI with Omar- I incorporated elements of cognitive-behavioural therapy (CBT), solution-focused brief therapy (SFBT) and personal construct psychology (PCP) in our sessions. Responding to individual needs is vital in any intervention (Lowinson et al., 1997) and sometimes this meant abandoning an MI 'agenda' so that Omar could discuss his feelings about his father. I was happy to respond to Omar's 'pro-cannabis' ideas and am reassured to have this affirmed by the literature. Harris, Aldea & Kirkley (2006)

argue that if an adolescent is passionate about the benefits of drug use, it is obstructive to the change process to avoid discussing these.

Omar's speech contained instances of 'change talk' but was largely ambivalent. The literature suggest that this 'back and forth' speech is entirely normal (Moyers & Martin, 2006) and that ambivalence is a key part of the change process (Miller & Rollnick, 1991, Prochaska, DiClemente & Norcross, 1992). However, this is difficult to negotiate as a practitioner- I found it difficult to assess Omar's readiness to/stage of change and to determine whether he wished to cease using certain substances anymore i.e. was I imposing an abstinence agenda that Omar was no longer 'subscribed' to?

Omar's ongoing cannabis and other drug use is likely to have undermined and inhibited the cognitive, behavioural and neuro-chemical processes involved in generating and sustaining motivation to change, thereby reducing the chances of MI succeeding: "Substance use generally involves a physiological addiction…that may complicate the change process." (Burke et al., 2003, p. 858). Given that Omar's substance misuse seemed to function as an escape from difficult feelings, his ambivalence and reluctance to cease using these substances is understandable. I would suggest that until more adaptive coping mechanisms are learnt, he is unlikely to be ready to replace his substance misuse with healthier means of coping. Perhaps Omar's self-reported depressed mood jeopardised the success of MI, considering the impact of low mood on motivation (e.g. Lonigan, Carey & Finch 1994).

Reflective evaluation and implications for future practice

Reviewing the literature has increased my knowledge of the theories pertaining to MI and will assist in informing my future practice of MI. This knowledge will also be useful in extrapolating the reasoning behind MI when working with schools, families and other professionals. I think that substance misuse makes access to psychological intervention

particularly difficult. Although this should not prevent a practitioner from eliciting change, it does make the process more complex.

Encouraging cessation also raised the issue of threatening Omar's social belonging- a basic human need. It is possible that Omar anticipated aversive social consequences if he abstained from drug use. As such, in future I will not neglect to attend to skills which may support the young person in making whichever change MI is targeting e.g. social skills to resist peer pressure and minimise the likelihood of social isolation.

Omar defended substance misuse with a discourse involving autonomy, personal choice and freedom. Omar's resistance to change may have been because he was defending core beliefs and values regarding personal freedom to experiment and what he perceived as 'the developmental necessity of experimentation with drugs'. Perhaps I ought to have explored these values more. Resistance may equally have resulted because I overestimated his readiness to change (Burke, 2011: Geller & Dunn 2011), a common mistake by practitioners (Rollnick & Allison, 2003).

During consultations, if consultees raise motivation as an issue, I will share the 'OARS' strategy and encourage them to resist confrontational or authoritarian approaches in their interactions. I think that a particular strength of MI is its focus on increasing self-efficacy. In doing so, one builds on young people's global capacity for change. I am conscious of my own nascent MI skills and am especially keen to be mindful of maintaining congruence between my sense of the young person's stage of change and their own personal sense of readiness (Rollnick, 1998). In applying SFBT, I will be conscious of maintaining that congruence between practitioner and client stages of change when determining when to move the discussion towards solutions. I think that gauging when the young person has moved from considering change to committing to change will be a difficult skill to develop, but crucial so as to preserve the sense of autonomy and self-directedness that embodies MI.

There is a need for EPs to identify factors that mediate and moderate the effects of MI through research (Hettema et al., 2005). Without identifying these, one cannot reliably assess the suitability or predict the outcomes of MI for an individual nor individually tailor the intervention to suit their needs.

References

Allsop, S. (2007). What is this thing called motivational interviewing? *Addiction, 102*, 343-345.

Amrhein, P. C., Miller,W. R., Yahne, C. E., Palmer, M. & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcomes. *Journal of Consulting and Clinical Psychology, 71*, 862–878. doi:10.1037/0022-006X.71.5.862

Apodaca, T.R. & Longabaugh, R. (2009). Mechanisms of change in motivational interviewing: A review and preliminary evaluation of the evidence. *Addiction, 104*, 705-715. doi:10.1111/j.1360-0443.2009.02527.x

Audrain-McGovern, J., Stevens, S., Murray, P. J., Kinsman, S., Zuckoff, A., Pletcher, J., et al. (2011). The efficacy of motivational interviewing versus brief advice for adolescent smoking behavior change. *Pediatrics, 128*(1), 101–111. doi:10.1542/peds.2010-2174

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology, Vol. 6.* (pp. 1 – 62). New York: Academic Press.

Britt, T. W., Greene-Shortridge, T. M., Brink, S., Nguyen, Q. B., Rath, J., Cox, A. L., et al. (2008). Perceived stigma and barriers to care for psychological treatment: Implications for reactions to stressors in different contexts. *Journal of Social & Clinical Psychology, 27*, 317–335. doi:10.1521/jscp.2008.27.4.317

Britton, P. C., Patrick, H., Wenzel, A., & Williams, G. C. (2011). Integrating motivational interviewing and self-determination theory with cognitive behavioral therapy to prevent suicide. *Cognitive and Behavioral Practice, 18*, 16–27. doi:10.1016/j.cbpra.2009.06.004

Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology, 71*, 843−861. doi:10.1037/0022-006X.71.5.843

Burke, B. L. (2011). What can Motivational Interviewing do for you? A commentary on the Rationale for Adding Motivational Interviewing to Cognitive Behavioral Therapy. *Cognitive and Behavioral Practice, 18,* 74-81.

Colby, S. M., Monti, P. M., O'Leary Tevyaw, T., Barnett, N. P., Spirito, A., Rohsenow, D. J., et al. (2005). Brief motivational intervention for adolescent smokers in medical settings. *Addictive Behaviors, 30*(5), 865–874. doi:10.1016/j.addbeh.2004.10.001

Colby, S. M., Nargiso, J., O'Leary Tevyaw, T., Barnett, N. P., Metrik, J., Lewander, W., Woolard, R. H., & Rosenhow, D. J. (2012). Enhanced motivational interviewing versus brief advice for adolescent smoking cessation: Results from a randomized clinical trial. *Addictive Behaviors, 37,* 817-823. doi: 10.1016/j.addbeh.2012.03.011

Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination research.* Rochester, NY: University of Rochester Press.

Draycott, S., & Dabbs, A. (1998). Cognitive dissonance 2: A theoretical grounding of motivational interviewing. *British Journal of Consulting and Clinical Psychology, 37,* 355–364. doi:10.1111/j.2044-8260.1998.tb01391.x

Geller, J., & Dunn, E. C. (2011). Integrating motivational interviewing and cognitive behavioral therapy in the treatment of eating disorders: Tailoring interventions to patient readiness for change. *Cognitive and Behavioral Practice, 18,* 5–15. doi:10.1016/j.cbpra.2009.05.005

Harris, R. S., Aldea, M. A., & Kirkley, D. E. (2006). A motivational interviewing and common factors approach to change in working with alcohol use and abuse in college

students. *Professional Psychology: Research and Practice, 37*(6), 614-621. doi:10.1037/0735-7028.37.6.614

Hettema, J., Steele, J. & Miller,W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology, 1*, 91–111.

Huver, R.M.E., Engels, R.C.M.E., & De Vries, H. (2005). Are anti-smoking parenting practices related to adolescent smoking cognitions and behaviour? *Health Education Research, 21*, 66–77. doi:10.1093/her/cyh045

Jensen, C. D., Cushing, C. C., Aylward, B. S., Craig, J. T., Sorell, D. M., & Steele, R. G. (2011). Effectiveness of motivational interviewing interventions for adolescent substance use behavior change: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 79*(4), 433–440. doi:10.1037/a0023992

Lepper, M. R., Greene, D. Nisbett, R. E. (1973). Undermining children's intrinsic interest with extrinsic reward: A test of the 'overjustification' hypothesis. *Journal of Personality and Social Psychology, 28* (1), 129–137. doi:10.1037/h0035519

Lonigan, C.J., Carey, M.P. & Finch Jr, A.J. (1994). Anxiety and depression in children and adolescents: negative affectivity and the utility of self-reports. *Journal of Consulting and Clinical Psychology, 62,*1000–1008. doi:10.1037//0022-006X.62.5.1000

Lowinson, J., Ruiz, P., Millman, R. & Langrod, J. (eds). (1997). *Substance Abuse: a Comprehensive Textbook* (3rd ed). Baltimore: Williams & Wilkins.

Luborsky, L., Diguer, L., Seligman, D. A., Rosenthal, R., Krause, E. D., Johnson, S., et al. (1999). The researcher's own therapy allegiances: A "wild card" in comparisons of treatment efficacy. *Clinical Psychology: Science and Practice, 6*, 95–106. doi:10.1093/clipsy/6.1.95

Lundahl, B. W., Kunz, C., Tollefson, D., Brownell, C., & Burke, B. L. (2010).

Meta-analysis of Motivational interviewing: Twenty Five years of research. *Research on Social Work Practice, 20*, 137–160.

Martins, R. K., & McNeill, D. W. (2009). Review of motivational interviewing in promoting health behaviors. *Clinical Psychology Review, 29*, 283–293. doi:10.1016/j.cpr.2009.02.001

McCambridge, J., Day, M., Thomas, B.A. & Strang, J. (2011). Fidelity to Motivational Interviewing and subsequent cannabis cessation among adolescents. *Addictive Behaviours, 36*(7), 749-54. doi:10.1016/j.addbeh.2011.03.002

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY: Guilford Press.

Miller, W. R., & Rollnick, S. (2004). Talking Oneself into Change: Motivational Interviewing, Stages of Change, and Therapeutic Process . *Journal of Cognitive Psychotherapy: An International Quarterly, 18*(4), 299-308. doi: 10.1037/0022-006X.72.6.1050

Miller, W. R., Benefield, R. G. & Tonigan, J. S. (1993). Enhancing motivation for change in problem drinking: a controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology, 61*, 455–461. doi:10.1037//0022-006X.61.3.455

Moyers, T. B. & Martin, T. (2006). Therapist influence on client language during motivational interviewing sessions: Support for a potential causal mechanism. *Journal of Substance Abuse Treatment, 30*, 245-251.

Naar-King S. (2011). Motivational interviewing in adolescent treatment. *Canadian Journal of Psychiatry, 56*(11), 651–657.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*, 1102−1114. doi:10.1037//0003-066X.47.9.1102

Prochaska, J.O. & DiClemente, C.C. (1992). Stages of change in the modification of problem behavior. In Hersen, M., Eisler, R. & Miller, P.M. *Progress in behavior modification. Vol. 28*. Sycamore, IL. Sycamore Publishing.

Radloff, L.S. (1991). The use of the Center for Epidemiologic Studies Depression Scale in adolescents and young adults. *Journal of Youth and Adolescence, 20*, 149–166. doi:10.1007/BF01537606

Rollnick, S. (1998). Readiness, importance, and confidence: Critical conditions of change in treatment. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors: Processes of change* (2nd ed), (pp. 49-60). New York: Plenum Press.

Rollnick, S. & Allison, J. (2003) Motivational Interviewing. In N. Heather and T. Stockwell (Eds). *The Essential Handbook of Treatment and Prevention of Alcohol Problems.* (pp. 105-115). Chicester: Wiley.

Strang, J. & McCambridge, J. (2004). Can the practitioner correctly predict outcome in motivational interviewing? *Journal of Substance Abuse Treatment, 27*, 83– 88. doi:10.1016/j.jsat.2004.05.003

Topping, K.J. & Ehly, S. (eds.) (1998). *Peer Assisted Learning*. Mahwah NJ & London UK: Lawrence Erlbaum.

Vader, A. M., Walters, S. T., Prabhu, G. C., Houck, J. M., & Field, C. A. (2010). The Language of Motivational Interviewing and Feedback: Counselor Language, Client Language, and Client Drinking Outcomes. *Psychology of Addictive Behaviors, 24*(2), 190-197. doi: 10.1037/a0018749