

Critique of article randomised controlled trial of motivational interviewing comp...

[Psychology](#), [Motivation](#)



Critique of Journal article The article being critiqued is titled; Randomised controlled trial of motivational interviewing compared with drug information and advice for early intervention among young cannabis users written by Jim McCambridge, Renee L Slym and John Strang published in 2008 in the journal *Addiction*, pages 103-111.

Cannabis is the most widely used illegal drug and poses many physical, social and psychological risks especially in young people, it seems that even with the current primary interventions which aim to prevent the drug being used altogether they have not always proved effective in stopping young people from taking up the drug and so a secondary prevention is need for those already taking the drug.

The main aim of the study is to test the effectiveness of Motivational interviewing (MI) in securing reductions in drug related risk amongst young cannabis users who have not sought help compared to just supplying users with drug information and advice. This was attempted through a randomised control trial (RCT) of young people at further education colleges in inner London.

One group's intervention would consist of a session of MI and the other group would be given drug information and advice (DIA) with the primary hypothesis that MI would reduce the mean frequency of cannabis use in the last month better than DIA. The study found no difference between the two interventions, it was thought that this was because MI fidelity was low and so concluded that further study into the consequences of low MI fidelity must be

undertaken and also that advice on its own could prove to be effective and must also be studied further.

The study employed an RCT which are considered to be a very reliable form of scientific evidence (Guyatt et al, 2008) and with a parallel groups design as used in this study, they allow two groups to be studied in exactly the same way apart from the treatment each group receives so for simply comparing one type of intervention to another it would seem the most logical design to use. RCT have however been criticised for not being cost effective (Sanson-Fisher et al, 2008) which is an area concluded by McCambridge et al (2008) that needs evaluation in order to fix under-developed public health interventions.

This study also provided good information on the exact protocol for allocation concealment, something that is often missing from other studies (Wood et al, 2008). The participants recruited for this study were all from Further Education (FE) colleges and as more young people are found in this type of institutional setting than any other (Of? ce for National Statistics, 2001) success in finding an effective intervention technique for this population would have good external validity and would contribute significantly to current knowledge of effective interventions for young people.

The sample size used was sufficient to detect for the smallest previous drug consumption effect and had more participants recruited than originally targeted which is beneficial for increased statistical power, however the

majority of the participants recruited were black with the second largest group being Asian and although this may be representative the ethnic diversity found in inner-London FE colleges any conclusions formed may lack external validity when comparing to the rest of the UK, a point which is considered in the discussion.

An aspect of recruitment which has not been given attention is that some of the participants recruited were already known to staff of the colleges, this may help when finding eligible candidates but bias may occur by picking young people that would be more compliant or who would take on board advice better than other known Cannabis users and so recruitment of eligible people may not have been not completely random.

This could however have been the only way to recruit as getting young people who are taking illegal drugs and who are not actively seeking help may be a difficult sample to obtain especially owing to the illegal nature of their behaviour and the fact that they would be asked for a sample of saliva possibly incriminating themselves.

Stratified allocation by college with equivalent numbers from each college in each study condition would allow for comparisons of colleges to be made which would highlight if any results obtained would be unique to one college although no comparison between colleges was made, most probably because no differences between MI and DIA were found. One group received a previously modified version of MI (McCambridge & Strang, 2003). Much of the intervention material is adapted from Miller & Rollnick (2002).

Notable changes to the original MI technique that makes it unique, more relevant for young drug users and has proved effective in a previous study (Gray et al, 2005) were to the lifestyle opening strategy to include questions about college studies, friends, family and leisure time with the good/less good section made to be specifically about drug use, the conversational style is more informal and lasts up to one hour allowing brief discussions of core topics.

The changes made provide an alternative effective application of MI for targeting young drug users. In the second study condition DIA is given with primacy being given to discussion of Cannabis use however in trying to keep a contrast with MI by abstaining from discussion on personalised risk the advice given may have been different from standard practice, this combined with poor fidelity to MI in the other condition may have made both conditions less effective resulting in their being no differences found between MI and DIA.

This point is highlighted by the practitioner intervention interaction which shows that with a more experienced practitioner greater MI fidelity is achieved resulting in a more effective MI intervention, a point that was picked up in the previous study by (Gray et al, 2005) and should have resulted in greater MI training being given to less experienced practitioners taking part in the current study.

In conclusion the study is a good attempt at testing the effectiveness of a newly developed MI technique to help young cannabis users in comparison

with existing preventative measures and could potentially have shown evidence for a more effective secondary preventative measure, however insufficient training in MI delivery caused MI fidelity to be low and highlights the point that for this type of intervention to prove effective practitioners must be highly skilled in MI, therefore future studies to be effective should invest more time in the teaching of MI techniques. References cited in the text Gray E. , McCambridge J. Strang J. The effectiveness of motivational interviewing delivered by youth workers in reducing drinking, cigarette and cannabis smoking among young people: quasi-experimental pilot study. Alcohol Alcohol 2005; 40: 535-9 Guyatt G H. , Oxman A D. , Kunz R. , Vist G E. , Falck-Ytter Y. , Schunemann H J. " What is " quality of evidence" and why is it important to clinicians? " British Medical Journal 2008. 336; 995-8 McCambridge J. , The ef? cacy of a brief motivational intervention in reducing drug consumption and related risk among young people. PhD thesis, University of London 2002. McCambridge J. , Strang J.

Development of a structured generic drug intervention model: a brief application of motivational interviewing with young people. Drug Alcohol Review 2003; 22: 391-9. Miller W R. , Rollnick S. Motivational Interviewing: Preparing People for Change, 2nd edn. New York: Guilford Press 2002. Of? ce for National Statistics. Social Trends 31. London: The Stationery Of? ce 2001. Rollnick S. , Heather N. , Bell A. Negotiating behaviour change in medical settings: the development of brief motivational interviewing. Journal of Mental Health 1992; 1: 25 - 37. Rollnick S. , Mason P. , Butler C. Health behaviour change: a guide for practitioners.

London: Churchill Livingstone 1999. Sanson-Fisher R W. , Bonevski B. , Green L W. , D'Este C " Limitations of the randomized controlled trial in evaluating population-based health interventions". American Journal of Preventative Medicine 2007 33 (2): 155-61. Wood L. , Egger M, Gluud L L. , Schulz K F. , Juni P. , Altman D G. , Gluud C. , Martin R M. , Wood A J. , Sterne J A. " Empirical evidence of bias in treatment effect estimates in controlled trials with different interventions and outcomes: meta-epidemiological study". 2008 [online] Available from [http://www. bmj. com/content/330/7499/1049. full](http://www.bmj.com/content/330/7499/1049.full) [accessed 12/01/2012 14: 16]