



Studiehandleiding driedaagse training ‘Motiverende gespreksvoering’

Hoe doe je het en wat betekent dit voor jou?

Rik Bes & Vincent Kortleve

Deze cursus en cursushandleiding is ontwikkeld en geschreven door Viaperspectief ism Centre for Motivation and Change (CMC).

Alle rechten voorbehouden. Niets van deze uitgave mag worden verveelvoudigd en/of openbaar gemaakt door middel van druk, fotokopie, microfilm of op welke andere wijze dan ook, zonder voorafgaande schriftelijke toestemming van Viaperspectief en CMC.

© 2014 Viaperspectief

Inhoudsopgave

Inleiding en verantwoording	4
Leeswijzer	6
Oriëntatie op het cursusprogramma	6
Doelstellingen	7
Planning en globale inhoud	7
Dag 1	8
Dag 2	10
Dag 3	12
Bibliografie.....	14
Bijlage I	15
Bijlage II	16
Bijlage III	17
Bijlage IV	30
Bijlage V	31
Bijlage VI - Tabel Verandertaal	32
Bijlage VII – Stadia van gedragsverandering.....	33
Bijlage VIII - Observatiebladen.....	34
Bijlage IX	41

Inleiding en verantwoording

Inleiding

Fysiotherapeuten houden zich, bewust en onbewust, bezig met het beïnvloeden van gedrag van de cliënt. Al decennia lang. De laatste 10 jaar is er steeds meer aandacht voor het bewust en professioneel begeleiden van cliënten in het veranderen van hun gedrag. Gespreksvoering is hierin een belangrijk instrument. De huidige wetenschappelijke inzichten geven aan dat 'Motiverende gespreksvoering' een meerwaarde heeft bij het ondersteunen van gedragsverandering en motivatie. Hier toe is deze cursus ontwikkeld. De cursus is gericht op het ontwikkelen van vaardigheden en technieken in Motiverende gespreksvoering zodat deze kunnen worden ingezet tijdens het coachen van cliënten in het veranderen van hun gedrag.

De opzet van de cursus is zodanig gekozen dat u de belangrijkste technieken van Motiverende gespreksvoering leert toe te passen. Ook wordt stil gestaan bij de onderliggende attitude die van belang is tijdens het begeleiden van cliënten. Verder staan we stil bij uw eigen geschiktheid. Tenslotte maken we doelen en actieplannen om te zorgen dat u in de praktijk ook echt aan de slag gaat met het geleerde.

Overigens: gespreksvoering leren gaan meestal niet heel gemakkelijk. Voor het ontwikkelen van uw communicatieve vaardigheden en bijpassende attitude's is veel nodig. Uw tijd, geduld, doorzettingsvermogen, reflectie, feedback en wat talent. Dat lukt dus niet in twee dagen cursus. Na de cursus gaat het eigenlijk pas echt beginnen.....

Gespreksvoering verbeteren en communicatieprincipes ervaren.

Ieder mens die zich bewust wordt van zijn eigen wijze van communicatie herkent wel het volgende. Als je gaat letten op je manier van vragen stellen gaat het niet meer vanzelf. Sterker nog, iets wat je anders nooit gebeurt, gebeurt nu wel: je weet een moment even niet wat je zou moeten vragen en je zit te stotteren en hakkelen. Of erger: je loop totaal vast. Je bent *bewust onbekwaam*. En dan voelt erg onaangenaam.

Maslow onderscheidt vier leerstadia die ook wel de vier bewustwordingsfases worden genoemd, hieronder staan de leerstadia met telkens een korte beschrijving:

Onbewust - onbekwaam

Toen Frits een aantal jaren fysiotherapeut was kwam hij in een praktijk te werken waar de therapeuten wekelijks met elkaar intervisie deden. Bij de eerste intervisie maakte een ervaren manueel therapeut hem bewust van het feit dat hij wel erg sturend was in zijn benadering van cliënten. Hij vond zelf altijd dat hij beleefd en respectvol was naar mensen en veel ruimte liet aan zijn cliënten. De voorbeelden die de collega noemde overtuigde hem er echter van dan hij mogelijk te sturend was. Omdat zijn klinisch redeneren volgens zijn collega erg slecht was besloot hij een vervolg opleiding te gaan volgen: manuele therapie.

Bewust - onbekwaam

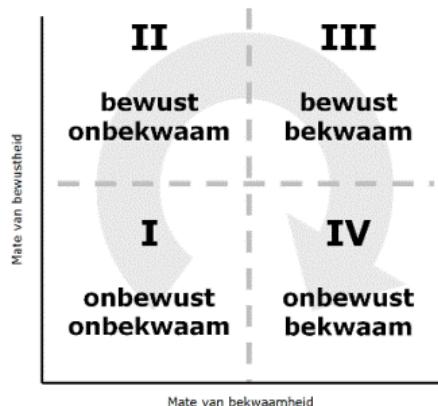
Frits stortte zich in zijn nieuwe opleiding. Tijdens deze opleiding werd ook de nodige aandacht besteedt aan professionele gespreksvoering door de therapeut. Tijdens één van de workshops moest hij in een oefening een gesprek voeren waarbij hij door middel van open vragen een analyse moest doen van het

gezondheidsprobleem van de cliënt. Na 3 vragen liep het gesprek vast. Hij had geen idee wat hij nog meer kon vragen; zijn open vragen waren 'op'.

Bewust - bekwaam

Het was Frits duidelijk: hij moest het stellen van open vragen verder ontwikkelen. In de gesprekken die

hij voerde met de cliënten in de praktijk probeerde hij vaker open vragen te stellen. Hij ontdekte dat hij sommige vragen vaker stelde. Daarom maakte hij een lijstje van open vragen die hij geschikt vond. In de loop der weken groeide dit lijstje uit tot een stevige lijst met mogelijke open vragen, min of meer gerangschikt op thema. Enkele maanden later kon hij tijdens een gesprek snel afwegen of hij een open of gesloten vraag wilde stellen en gebruikte dan af en toe zijn lijst met open vragen. Na enige tijd had hij de lijst niet meer nodig maar moest nog wel denken over welke vraag hij stellen zou.



Onbewust - bekwaam

Aan het einde van zijn opleiding ging het allemaal 'automatisch'. Hij kon zijn vragen op veel manieren stellen en kon bovendien als vanzelf juist gesloten of juist open vragen stellen, doelgericht en efficiënt.

Als je iets nog nooit gedaan hebt kan het eenvoudig lijken (onbewust onbekwaam). Als je start met oefenen kom je er achter wat er allemaal voor komt kijken en hoeveel oefening er nodig is. Soms heb je dan het idee dat het je nooit gaat lukken (bewust onbekwaam). Dit is vaak een onprettig gevoel. Langzamerhand krijg je het in de vingers en gaat het je steeds gemakkelijker af (bewust bekwaam). Tenslotte na heel veel oefening lijken de dingen als vanzelf te gaan (onbewust bekwaam). Je kunt deze fases voortdurend blijven rondgaan. Steeds kun je nieuwe dingen ontdekken die je nog niet kende. Het 'model' kan je helpen te begrijpen waarom bepaalde fases van het leerpoces zo onaangenaam voelen. Hierdoor wordt het eenvoudiger deze fases gewoon te doorstaan. Als het nieuwe gedrag niet wordt volgehouden, treedt er terugval op naar een eerdere fase (relapse). Sommige mensen gaan sneller dan anderen en sommige blijven in een bepaalde fase steken. Mensen kunnen op elk punt het model binnenkomen of uitgaan. Hou dit dus in de gaten als het even niet lukt. En ja, het kost de nodige moeite. De woorden van William A. Foster zijn wat dit betreft treffend:

Quality is never an accident,

it is always the result of high intention, sincere effort,

intelligent direction and skillful execution,

it represents the wise choice of many alternatives.

Verantwoording

Het verklaren en beïnvloeden van het menselijk gedrag is ingewikkeld. Motiverende gespreksvoering kent tal van facetten en technieken. Deze cursus helpt u basis vaardigheden ontwikkelen op het gebied van Motiverende gespreksvoering en helpt u dit te doen vanuit de correcte grondhouding.

Leeswijzer

Enkele wenken bij het gebruik van deze cursushandleiding.

Lees als eerste de ‘Inleiding en verantwoording’ voor een plaatsbepaling van de cursus.

Een globaal overzicht van het cursusprogramma wordt beschreven in de paragraven van de hoofdstukken ‘**Fout! Verwijzingsbron niet gevonden.**’.

Een uitgebreide beschrijving van de doelen van de twee cursusdagen vindt u in het hoofdstuk ‘Doelstellingen’.

Per cursusdag is een programma samengesteld en zijn voorbereidingsopdrachten geformuleerd. Deze vragen voorbereidingstijd. De gedetailleerde dagprogramma’s zijn te vinden in de hoofdstukken ‘Dag 1’, ‘Dag 2’ en ‘Dag 3’.

In de bijlage zijn allerlei stukken opgenomen die u nodig heeft bij de voorbereidingsopdrachten. Hiernaar wordt telkens verwezen.

Oriëntatie op het cursusprogramma

Hoe? en Waarom?

Dit cursusprogramma is geschikt om de basisbeginselen van Motiverende gespreksvoering (MG) eigen te maken. Het behandelt de ‘geest’ van MG, de attitude van de therapeut die MG toepast en diverse technieken die van belang zijn. Ter voorbereiding op de bijeenkomst verdiept u zich in MG vanuit enige literatuur/artikelen. Ook reflecteert u op zichzelf met betrekking tot uw communicatieve eigenschappen en stijlen door middel van het samenstellen van een persoonlijk profiel. Het programma kent een interactief karakter. De voorbereiding op, en deelname van de cursisten tijdens de bijeenkomsten is cruciaal en bepalen in belangrijke mate het persoonlijke eindresultaat.

Voorbereiding en verwerking

Voor de cursusdagen wordt verwacht dat u de voorbereidende opdrachten hebt uitgevoerd zoals in deze modulehandleiding wordt beschreven. Deze opdrachten vragen de nodige tijd. Begin dus op tijd. Ook helpen de opdrachten u in de verwerking van de cursusdagen. Door een goede voorbereiding is uw leerrendement bij deze cursus groter.

Toetsing

Het certificaat wordt uitgereikt wanneer u voldoet aan de aanwezigheids- en deelnameplicht.

Doelstellingen

De fysiotherapeut.....

- ✓ ...weet wat motiverende gespreksvoering is. Hij kan uitleggen wat de uitgangspunten zijn, welke attitude elementen belangrijk zijn en welke technieken central staan
- ✓ ... kent de rol van stages of change in gedragsverandering en kent de centrale waarde van intrinsieke motivatie van de client
- ✓ ... kan de basisvooraarden voor motiverende gespreksvoering realiseren in een rollenspel.
- ✓heeft zicht op mogelijke oorzaken van niet effectieve consulten en op manieren daarmee anders om te gaan
- ✓ ...heeft inzicht in eigen reparatiereflexen en hoe deze hanteerbaar te maken dan welte verminden en veranderen
- ✓ ... weet op motiverende wijze (dus vanuit de uitgangspunten van motiverende gespreksvoering) de patient action plans te laten maken en zijn sociale omgeving te benutten in het kader van de gedragsverandering van de patient. Hij realiseert dit in een rollenspel.
- ✓ ... weet op motiverende wijze (dus vanuit de uitgangspunten van motiverende gespreksvoering) de attitudes van de patient te benutten ten einde de gedragsverandering van de patient te ondersteunen. Hij is tevens in staat de zelfeffectiviteit van de patient te versterken door middel van motiverende gespreksvoering. Hij realiseert dit in een rollenspel.
- ✓ ... weet op welke wijze hij weerstanden in een gesprek kan voorkomen en hoe hij met weerstand om moet gaan. Hij realiseert dit in een gesprek met een medecursist.
- ✓ ...heeft inzicht in de rol van zijn eigen taalgebruik en ondersteunt verandertaal van de patient.

Beginvereisten

De deelnemende fysiotherapeuten worden toegelaten tot de cursus indien:

- ✓ zij een diploma fysiotherapie bezitten
- ✓ zij daarnaast de behoefte hebben hun niveau van fysiotherapeutische kennis en vaardigheden te verbeteren met betrekking tot het ondersteunen van de gedragsverandering van de cliënt en het versterken van het zelfmanagement.

Hoeveel bedraagt de studiebelasting?

De studiebelasting voor de cursusdagen bedraagt in totaal minimaal 30 uur studiebelasting. Dit is opgebouwd uit 3 x 7 uur contacttijd en (minimaal) 3 x 3 uur voorbereidingstijd. Accreditatie is verleend voor het register algemeen prakticus voor punten.

Planning en globale inhoud

De cursus bestaat uit drie cursusdagen. De eerste dag staat in het teken van een introductie van Motiverende gespreksvoering en allerlei (basis)technieken. De tweede dag gaan we door op de diverse technieken en reflecteren we op je geschiktheid en ontwikkelmogelijkheden in Motiverende gespreksvoering. De derde dag werken we aan het verder uitbouwen van je vaardigheden en staan we stil bij jouw ervaringen uit de praktijk, het gesprek dat je ter beoordeling hebt aangeleverd en je verdere ontwikkeling in MG.

Dag 1

Hieronder vind je de voorbereidingsopdrachten voor de eerste dag, het programma van de eerste cursusdag en de verwerkingsopdrachten van de eerste cursusdag.

Voorbereidingsopdrachten voor de 1^e dag (dagdeel 1 en 2)

1. Voer als allereerst de volgende opdracht uit. In de bijlage van deze handleiding is een vragenlijst opgenomen om uw kennis te onderzoeken: Bijlage I – Korte vragenlijst MI. Vul de vragenlijst in en mail deze naar het cursussecretariaat uiterlijk 2 dagen voor de eerste cursusdag. (tijdsindicatie 15-20 minuten)
2. Bereid tenminste 2 eigen casuïstiek(en) voor waarbij het uitblijven van de gewenste gedragsverandering aan de orde was. Werk de casustiek uit. (tijdsindicatie 45 minuten)
 - a. Beschrijf hierbij het gewenste gedrag
 - b. Uw interventies
 - c. Eventuele weerstand bij uw patiënt of uzelf
 - d. Uw eigen rol in dit proces
3. Lees het artikel ‘Makkelijk mensen motiveren door Motiverende Gespreksvoering.’ uit Bijlage III. Vat het artikel kort samen voor jezelf of maak een schema of ‘mindmap’ ervan. Een voorbeeld van een mindmap vindt je in bijlage II. (tijdsindicatie 120 minuten)

Programma dag 1

08.45 – 09.00	Ontvangst
09.00 – 09.30	Kennismaking en inventarisatie persoonlijke leerdoelen
09.30 – 10.45	Ambivalentie en ‘Stages of Change’ model Praktische oefening aan de hand van videofragment, analyse en plenaire simulatie
10.45 – 11.00	Pauze
11.00 – 11.45	Vervolg Ambivalentie; oefening in drietallen
11.45 – 12.30	Spirit en principes in de praktijk
12.30 – 13.00	Lunch
13.00 -14.45	Gesprekstechniek; gebruik van reflecties, open vragen, samenvattingen en affirmaties Uitleg en praktische oefening middels video-response en simulatie-dialogen
14.45 – 15.00	Pauze

- Motiverende Gespreksvoering -

	Korte uitleg
15:30 – 17.00	Een aantal strategieën voor korte, druk-bezette consulten: . Agenda setting . Informatie en advies geven . Contact maken (rapid engagement)
17.00 – 17.15	Afronden dag 1

Verwerkingsopdracht van de 1^e dag.

1. Persoonlijke leerdoelen en actieplannen geformuleerd in de bijeenkomst mbt eigen gespreksvoering in de praktijk.

Dag 2

Hieronder vind je de voorbereidingsopdrachten voor de tweede dag, inclusief het programma en de verwerkingsopdrachten van de eerste cursusdag.

Voorbereidingsopdrachten voor de 2^e dag

1. Natuurlijk is het ook in deze cursus belangrijk te kijken naar de wetenschappelijke onderbouwing van MG. Hiertoe worden twee artikelen aangereikt ter voorbereiding op de tweede cursusdag. Tevens zijn meer artikelen digitaal beschikbaar; deze worden tijdens de cursus via een dropbox gedeeld.
 - a. Lees uit de bijlage het wetenschappelijke artikel *A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies* van Brad W. Lundahl, Chelsea Kunz, Cynthia Brownell, Derrik Tollefson and Brian L. Burke. Research on Social Work Practice 2010 20: 137. (tijdsindicatie 100 minuten)
 - b. Lees uit de bijlage ook ‘*Motivational Interviewing*’ van Jennifer Hettema, Julie Steele, and William R. Miller uit Annual Review Clin. Psychol. 2005. 1:91–111. (tijdsindicatie 100 minuten)
 - c. Beschouw beide artikelen kritisch. Neem je aantekeningen mee naar de bijeenkomst van dag 2. (tijdsindicatie 20 minuten)

Programma dag 2

08.45 – 09.00	Ontvangst
09.00 – 09.20	Terugblik op Dag 1
09.20 – 10.30	Weerstand en Verander-taal . Uitleg oefeningen . Simulatie-
10.30 – 10.45	Pauze
10.45 – 12.30	Weerstand en Verander-taal (vervolg)
12.30 -13.00	Lunch
13.00 – 14.00	Casuïstiek van deelnemers . Inventarisatie plenair groepjes . Oefening . Oefening in kleine
14.00 – 14.45	Bespreking wetenschappelijk bewijs aan de hand van de artikelen uit de voorbereiding van vandaag

- Motiverende Gespreksvoering -

14.45 – 15.00	Pauze
15.00 – 16.30	Plenaire integratie-oefening. Iedereen oefent en/of geeft feedback. Thema: de balans tussen cliënt-gericht en directief zijn.
16.30 – 17.00	Huiswerkopdracht
17.00 – 17.15	Afronden Dag 2

Verwerkingsopdracht van de 2^e dag.

1. Persoonlijke leerdoelen en actieplannen geformuleerd in de bijeenkomst mbt eigen gespreksvoering in de praktijk..

Dag 3

Hieronder vind je de voorbereidingsopdrachten voor de derde dag, het programma en de verwerkingsopdrachten.

Voorbereidingsopdrachten voor de 1^e dag (dagdeel 1 en 2)

1. De volgende bijeenkomst is over enkele weken. In de tussentijd oefen je in je praktijk bij je patienten de geleerde technieken en attitude.
 - i. Neem in de loop van de weken 3 gesprekken op (audio of video) die je voert met je clienten. Luister de gesprekken terug en observer je eigen vaardigheden met behulp van observatieblad 'Vechten of dansen', 'ORBS' en 'Verandertaal'. Vergeet niet om toestemming van de client te vragen voordat je een opname maakt! (tijdsindicatie 120 minuten)
 - ii. Kies het beste gesprek uit en schrijf een reflectie op dit gesprek en jou functioneren. Maak hierbij gebruik van de presentatie-handout en het observatieblad. Formuleer als besluit op je reflectie twee leerdoelen waarmee je aan de slag gaat in de praktijk en waar aan je wilt werken in de laatste cursusdag. (tijdsindicatie 30 minuten)
 - iii. Stuur de opname van het gesprek en jouw reflectie hierop naar het cursussecretariaat. Als het video/audio bestand erg groot is kun je eenvoudig gebruik maken van <https://www.wetransfer.com> (tijdsindicatie 10 minuten)

Programma dag 3

08.45 – 09.00	Ontvangst
09.00 – 09.45	Leerwensen voor vandaag n.a.v. ervaring met de huiswerkopdrachten
09.45 – 10.30	Motivatie nader bekijken; 4 niveaus . Korte uitleg . Koppeling naar en oefening n.a.v. huiswerkopdrachten
10.30 – 10.45	Pauze
10.45 – 12.30	Simulatie-oefening (regie-model) plenair, gevolgd door oefeningen in kleine groepjes n.a.v. leerwensen huiswerkopdrachten
12.30 – 13.00	Lunch
13.00 – 14.45	Capita selecta. Opties o.a.: . Therapietrouw ondersteunen . Terugval-preventie . Variatie in reflectie-diepte

- Motiverende Gespreksvoering -

	Korte reminder theorie, gevuld door oefening
14.45 – 15.00	Pauze
15.00 – 16.45	Vervolg Capita Selecta Reflectie op individuele leerdoelen en ervaring met de huiswerkopdracht, met als doel het opstellen van een individueel leer-/veranderplan.
16.45 – 17.00	Afsluitende individuele opdracht
17.00 – 17.15	Afronden cursus

Verwerkingsopdracht van de 1^e dag.

1. Persoonlijke leerdoelen en actieplannen geformuleerd in de bijeenkomst mbt eigen gespreksvoering in de praktijk.

Bibliografie

Miller, W. R. & S. Rollnick (2014). *Motiverende gespreksvoering – derde editie. Mensen helpen veranderen.* Eklesia.

Prochaska, J. R. (2002). The Transtheoretical model and stages of change. In *Health behaviour and health education: theory, research and practice.* (pp. 99-120). San Francisco: Jossey-Bass.

Jennifer Hettema, Julie Steele, and William R. Miller. *Motivational interviewing.* Annual Review Clin. Psychol. 2005. 1:91–111.

Marije S. Koelewijn-van Loon, Trudy van der Weijden, Gaby Ronda, Ben van Steenkiste, Bjorn Winkens, Glyn Elwyn, Richard Grol. *Improving lifestyle and risk perception through patient involvement in nurse-led cardiovascular risk management: A cluster-randomized controlled trial in primary care.* Preventive Medicine 50 (2010) 35–44.

Brad W. Lundahl, Chelsea Kunz, Cynthia Brownell, Derrik Tollefson and Brian L. Burke. *A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies.* Research on Social Work Practice 2010 20: 137

Renata K. Martins, Daniel W. McNeil. *Review of Motivational Interviewing in promoting health behaviors.* Clinical Psychology Review 29 (2009) 283–293

Adrian Schoo. *Motivational Interviewing in the Prevention and Management of Chronic Disease: Improving Physical Activity and Exercise in Line with Choice Theory.* International Journal of Reality Therapy • Spring 2008 • Vol.XXVII, number 2

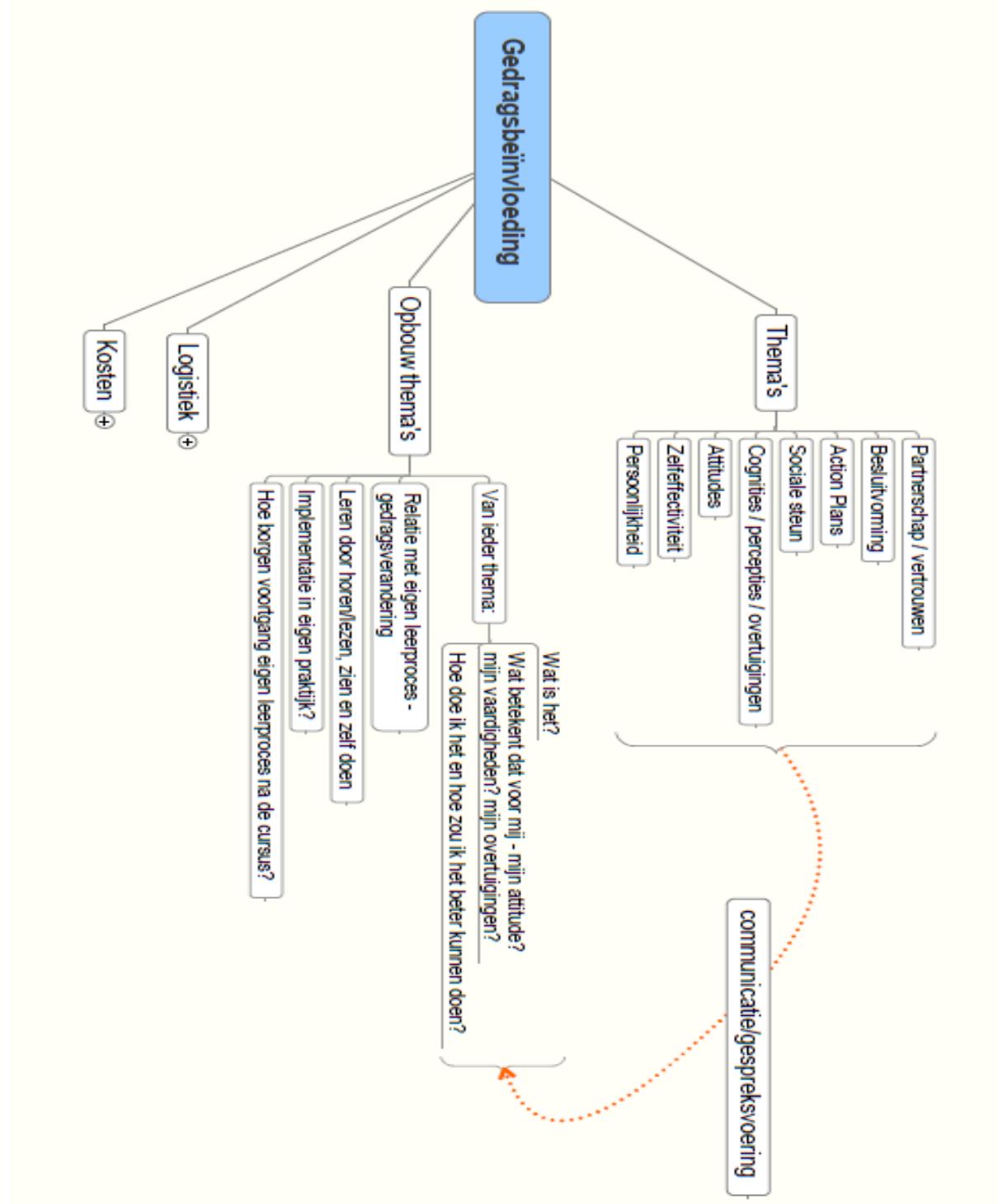
Ben van Steenkiste, Trudy van der Weijden, Henri E.J.H. Stoffers, Arnold D.M. Kester, Daniëlle R.M. Timmermans and Richard Grol. *Improving cardiovascular risk management: a randomized, controlled trial on the effect of a decision support tool for patients and physicians.* European Journal of Cardiovascular Prevention and Rehabilitation 2007, 14:44–50

Bijlage I

Vragenlijst MI – wordt per email toegezonden.

Bijlage II

Een voorbeeld van een mindmap, in dit geval een cursus (niet deze cursus) over gedragsverandering.



Bijlage III

Makkelijk mensen motiveren door Motiverende Gespreksvoering

Dit is een bewerkt artikel van Sergio van der Pluijm, trainer en coach van trainers in het reclasseringsveld en trainer voor het Instituut voor Eclectische Psychologie.

Mensen worden in het algemeen eerder overtuigd door de redenen die ze zelf hebben ontdekt en opgesomd, dan door de redenen die door anderen zijn opgesomd - Blaise Pascal, 17e eeuw.

DEEL 1

Inleiding

Ontmoet u wel eens weerstand? Wordt u wel eens moe van al die eigenwijze cliënten? Bedenkt u wel eens: 'je hoeft alleen maar te doen wat ik zeg en je leven zou zó veel mooier worden'? Grote kans dat u gelijk heeft en dat uw adviezen inderdaad precies zijn wat de cliënt nodig heeft. Alleen moet de cliënt dat niet van u horen, maar van zichzelf!

Zowel uit bovenstaande uitspraak van de 17e-eeuwse natuurwetenschapper als uit psychologisch, wetenschappelijk onderzoek van de laatste 30 jaar blijkt dat het niet effectief is om mensen te overtuigen van de noodzaak tot (blijvende) gedragsverandering. Dit komt doordat er bij vrijwel alle mensen die willen of moeten veranderen sprake is van ambivalentie en een behoefte aan autonomie. Vaak blijkt overtuigen, een heel enthousiaste aanpak, redder of bot confronteren zelfs averechts te werken. Wat wel werkt is het ontlokken van zelfmotiverende uitspraken.

Of je nu trainer bent, coach, therapeut, adviseur of manager: we hebben allemaal te maken met mensen die ambivalent staan tegenover de verandering die het leven van ze vraagt. Welnu, zou het niet mooi zijn als we mensen makkelijker konden motiveren? Als we minder hard hoefden te werken en tegelijkertijd effectiever zouden zijn? Als we weerstand zouden beantwoorden met aikido in plaats van worstelen?

Er is hoop: motiverende gespreksvoering

Op dit moment is deze nieuwe, veelbelovende communicatiestijl wereldwijd sterk in opkomst. Motiverende gespreksvoering is niet alleen een heel prettige benaderings- en gespreksstijl voor zowel gever als ontvanger, zij is ook bewezen effectief bij de meest uiteenlopende doelgroepen. Of het nu gaat om drugs- en alcoholverslaafden, suïcidale jongeren, delinquenten, of Zambiaanse dorpsbewoners die hun water moeten zuiveren: bij elke groep neemt de beoogde gedragsverandering significant toe als zij op deze manier bejegend worden. In de VS wordt op dit moment elke arts hierin getraind. Overgewaaid uit de Angelsaksische landen wordt deze interactiestijl ook in Nederland in steeds meer werkvelden toegepast, denk aan: lichamelijke en geestelijke gezondheidszorg, verslavingshulpverlening, reclassering en jeugdhulpverlening.

Veel vooronderstellingen en principes van motiverende gespreksvoering zullen u bekend voorkomen. Desondanks is het een valkuil om te denken: 'oh, dat doe ik al...'.

Achtergrond

Motiverende gespreksvoering is ontwikkeld in de jaren '80 door William Miller, hoogleraar in de psychologie en, zoals zo velen, leerling van Carl Rogers. Aanvankelijk was hij op zoek naar een effectieve therapie voor probleemdrinkers en wat hij ontdekte bleek zo effectief te zijn, dat het in steeds meer werkvelden werd toegepast en onderzocht. Hoewel ontstaan in de gedwongen hulpverlening, blijkt motiverende gespreksvoering betekenis te hebben voor iedereen die door een veranderproces gaat. Het is namelijk zo dat mensen die er in slagen hun gedrag blijvend te veranderen altijd door een fase van ambivalentie gaan: hij of zij luistert dan als het ware naar een engeltje op de ene schouder en naar een duiveltje op de andere en voelt zich gedwongen een keuze te maken. Zolang iemand nog twijfelt zal hij geen veranderpogingen doen die hout snijden.

Helaas kan deze fase soms wel een heel mensenleven duren: we kennen allemaal voorbeelden van mensen die - tegen beter weten in - hun doelen niet halen en/of hun problematische gedrag blijven voortzetten. Miller ontdekte nu dat je alleen met een bepaald soort communicatiestijl de gehele ambivalentie op tafel krijgt. Zeker bij problemen die omgeven zijn met oordelen is het niet eenvoudig een ruimte te creëren waarin de cliënt zich veilig genoeg voelt om zowel het engeltje als het duiveltje ten tonele te voeren. Later ontmoette William Miller Stephen Rollnick, een klinisch psycholoog, die onafhankelijk van hem gelijksoortige ontdekkingen had gedaan in een medische setting. Samen hebben zij motiverende gespreksvoering verder ontwikkeld, diverse boeken geschreven en wereldwijd honderden mensen opgeleid.

Wat is motiverende gespreksvoering?

De definitie van Miller luidt als volgt: motiverende gespreksvoering is een client-gerichte, directieve gespreksstijl voor het versterken van intrinsieke motivatie tot gedragsverandering door het verkennen en oplossen van ambivalentie. Een mondvol, dus laten we zijn definitie eens nader bekijken. Het is client-gericht, dus de waarden en diepere verlangens van de cliënt staan voorop. Het is directief, namelijk gericht op het verhelderen en opheffen van ambivalentie.

Het is een gespreksstijl, maar beoefenaars zeggen dat de spirit erachter belangrijker is dan de technieken. En het doel is natuurlijk dat de cliënt van binnenuit gemotiveerd raakt om te werken aan een gedragsverandering waar hij of zij *zelf* voor heeft gekozen en die hem dus niet is opgedrongen door een hulpverlener. Het is een manier om iemand heel geleidelijk door de verschillende fasen van gedragsverandering te looden, waarbij steeds zijn autonomie (en dus verantwoordelijkheid) overeind blijft. De verschillende fasen zijn: voorbeschouwing (er is nog geen problembesef), overpeinzing (men is ambivalent), besluitvorming, actieve verandering, consolidatie en evt. terugval. Elke fase vraagt weer om een eigen aanpak, maar de gesprekstechnieken en principes zijn steeds dezelfde. Sommige cliënten doorlopen deze hele cyclus meerdere malen alvorens blijvend te veranderen.

Hoe werkt het?

Je zou kunnen zeggen: iemand die motiverende gespreksvoering toepast laat *dát* deel van de client, dat wil en kan veranderen aan het woord, net zo lang tot de cliënt het zelf gaat geloven en in actie komt. Het is een manier om het maximaal aanwezige veranderpotentieel aan te boren, hoe diep weggestopt ook. Hierbij komen met name vier gesprekstechnieken van pas: Open vragen stellen, Reflectief luisteren, Bevestigen en Samenvatten (vaak afgekort tot ORBS). Daarnaast is een empathie-volle, niet-oordelende, op samenwerking gerichte basishouding van belang. In feite houd je de cliënt liefdevol een spiegel voor: 'kijk, dit is wat je zegt te willen en dit is hoe je het er nu van af brengt...' Dit wordt discrepantie

ontwikkelen genoemd, één van de leidende principes. Tot zijn eigen verbazing hoort bijvoorbeeld iemand die al 3 gevangenisstraffen achter de rug heeft, zich dan opeens zeggen dat hij eigenlijk wel meer rust wil in zijn leven en het toch wel vervelend vindt dat zijn dochtertje schrikt van elke politieauto en dat hij 'ook wel eens iets op wil bouwen'.

Een ander principe is: meebewegen met weerstand in plaats van 'de strijd aan gaan': niet worstelen, maar aikido... Een derde principe luidt: ondersteun persoonlijke effectiviteit. Een gouden regel is tenslotte dat de cliënt méér aan het woord is dan de hulpverlener en dat is voor veel mensen wennen. Soms wordt gedacht dat je als hulpverlener bij motiverende gespreksvoering geen grenzen kan aangeven, maar het tegendeel is waar: het is juist heel helder voor de cliënt als de kaders van het speelveld (de grenzen van de wet, bijvoorbeeld) duidelijk zijn. Maar binnen dit speelveld is vaak heel veel ruimte voor de cliënt om te bepalen wat en hoe hij wil veranderen. Zo kan een cliënt bijvoorbeeld ontdekken dat hij wil stoppen met cocaïne snuiven, maar wil doorgaan met hasj roken.

Een voorbeeld

Stel, iemand is ontslagen vanwege een drankprobleem, zit nog steeds thuis en drinkt veel. We noemen hem Jan. Hieronder vind je twee korte dialogen: één met hulpverlener A die een neiging heeft tot overtuigen en één met hulpverlener B die motiverende gespreksvoering toepast.

A: *Tsja we kunnen wel op zoek gaan naar ander werk, maar zo lang u blijft drinken heeft dat natuurlijk weinig zin.*

Jan: *Ja, dat snap ik, maar dat thuis zitten doet me geen goed, ik word daar hartstikke depressief van.*

A: *Daar kan ik me iets bij voorstellen, maar wie gaat u zo aannemen?*

Jan: *Dat weet ik niet, maar als ik eenmaal ander werk heb zal ik heus wel minder gaan drinken.*

A: *Ja, nu draait u de boel om! Nee, de drank moet eerst, heeft u al eens gedacht aan een afkickkliniek?*

Jan: *Een afkickkliniek? Zo erg is het nou ook weer niet! Die paar glazen...*

A: *Kom nou toch...*

Jan: *Ja maar, je denkt toch niet dat ik tussen de junks ga zitten!*

A: *Nou, dat valt best mee, verslaving kan iedereen overkomen, dus daar zitten echt niet alleen junks.*

Jan: *Nee, ik zie dat niet zo zitten.*

B: *Welk verband ziet u tussen werk en drank? (Open vraag)*

Jan: *Ja, dat gaat niet zo goed samen, dat is me nu wel duidelijk.*

B: *Vertel eens... (Open vraag)*

Jan: *Ja, ach, het begon met een borreltje na het werk en ik ben nooit zo snel dronken, dus het werd steeds meer. En ik stond er niet zo bij stil dat de alcohol zo lang in je bloed blijft, dus soms was ik tijdens de volgende dienst nog onder invloed... En ja, op een gegeven moment ging het toch opvallen.*

B: *Het is dus onschuldig begonnen en zo uit de hand gelopen dat uw collega's het merkten (Reflectie)*

Jan: *Ja, klopt. En zeker in mijn beroep is het natuurlijk not done om te drinken: ik kan het als piloot nu wel vergeten, maar het probleem is dat ik nu zó depressief ben, dat ik alleen maar meer ben gaan drinken. Ik zit echt in een negatieve spiraal...*

B: *En wat zou u daar mee willen? (Open vraag)*

Jan: *Ik wil wel gaan minderen, maar ik weet niet zo goed hoe.*

B: *Daar zijn verschillende mogelijkheden voor. Als je wilt kunnen we er samen een aantal bekijken.*

Jan: *Dat is goed.*

Dat Jan piloot is en geen bouwvakker is natuurlijk een instinkertje om u aan het denken te zetten. En voor u niet meer durft te vliegen: de dialogen zijn volkomen denkbeeldig en slechts bedoeld ter illustratie. Onbevoordeeld luisteren is wel een van de zaken die motiverende gespreksvoering in het begin niet zo eenvoudig maakt, maar gelukkig baart oefening hierin kunst. Ik wil u nu vragen beide dialogen nog eens te lezen met de uitspraak van Blaise Pascal in het achterhoofd. Waarschijnlijk valt u het volgende op. Jan is duidelijk ambivalent: er zijn redenen om te blijven drinken en redenen om te stoppen. In het gesprekje met hulpverlener A komen de redenen voor verandering vooral van de hulpverlener en gaat Jan op de andere kant van de ambivalentie 'zitten'. Dit uit zich in weerstand. In het 2e gesprek komt de verandertaal meer van Jan zelf. Ook is de sfeer in beide gesprekken totaal anders: het eerste wordt meer gekenmerkt door strijd en het tweede meer door samenwerking.

Tenslotte kunt u zien dat A heel hard aan het werk is en dat B een neutralere positie in neemt en wat meer 'achterover leunt'. In het tweede gesprekje ontstaat er vervolgens een opening om te praten over mogelijkheden die Jan mogelijk optimistisch zullen stemmen. Hier kan dan blijvende, autonome motivatie uit ontstaan.

Tenslotte

Heel lang is gedacht dat motivatie statisch is. Op de werkvloer hoorde je dan uitspraken als 'cliënt x is niet gemotiveerd' (en zal het ook nooit worden, was dan de bijbehorende gedachte). Nu blijkt echter dat motivatie een zeer dynamisch gegeven is: het is een direct gevolg van de kwaliteit van de interactie tussen hulpverlener en cliënt. Als de hulpverlener te zwaar op het engeltje leunt, zal de cliënt zelf het duiveltje gaan benadrukken. Provocatief coaches staan met een knipoog aan de kant van het duiveltje, zodat de cliënt het engeltje benadrukt. Heel effectief (ik heb er zelf met name bij (ex-)gedetineerden mooie resultaten mee bereikt) maar deze stijl moet wel bij je passen.

Motiverende gespreksvoering kiest voor de veilige, geleidelijke weg, waarbij de cliënt *zelf* ontdekt dat het engeltje hem op de lange termijn meer geluk, gezondheid en welbeinden zal brengen dan het duiveltje. Overigens wordt er binnen motiverende gespreksvoering ook gebruik gemaakt van provocatie en uitdaging, maar vaak pas wat later in het proces en/of bij zeer doorgewinterde cliënten.

Voor alle helderheid: motiverende gespreksvoering is, zeker in het begin, niet altijd gemakkelijk. Sommige mensen zullen een aantal dingen moeten afleren. Maar als je het eenmaal in de vingers heb zul je merken dat je meer resultaat bereikt met minder inspanning. Jij hoeft niet meer 'de cliënt te motiveren', de cliënt motiveert zichzelf (in gesprek met jou)...

DEEL 2

Hoewel in de literatuur over motiverende gespreksvoering niet expliciet over vooronderstellingen wordt gesproken, zijn deze er natuurlijk wel degelijk. Hieronder vind je de vooronderstellingen die ik zelf heb gedestilleerd uit diverse trainingen, literatuur en praktijk.

Sommige, zoals de vierde, zijn wel degelijk in wetenschappelijk onderzoek aangetoond en dus 'waar'. Het is echter veel interessanter om je af te vragen of je in je dagelijkse praktijk ook echt van bijvoorbeeld deze vierde vooronderstelling uit gaat. Als je vaak met kracht en veel enthousiasme probeert om mensen te overtuigen ga je hier waarschijnlijk niet vanuit. (Tenzij je dit provocatief doet, maar dan gaat deze vooronderstelling wel degelijk op). Ook de andere vooronderstellingen zijn de moeite waard om te toetsen aan je dagelijkse praktijk. Hier zijn ze:

1. Ieder mens wil wel iets veranderen
2. Mensen willen liever niet veranderen
3. Kortom: mensen zijn doorgaans ambivalent t.o.v. verandering
4. Mensen veranderen niet door wat anderen zeggen, maar door wat zij zichzelf horen zeggen in reactie op anderen
5. Als je de autonomie van de cliënt respecteert zal hij beter met je samen werken
6. Overtuigen werkt aversechts
7. Als iemand wel wil veranderen, maar er geen vertrouwen in heeft, gebeurt er niets
8. Iemand accepteren zoals hij is, zorgt dat-ie verandert
9. Meebewegen met de weerstand is effectiever dan 'de strijd aangaan'.
10. Uiteindelijk verandert alles en iedereen vanzelf...

1. Ieder mens wil wel iets veranderen

Ken je iemand die voor 100% tevreden is? Nee, ik ook niet. Het gras is immers altijd groener aan de andere kant. Zelfs de Dalai Lama wil graag dingen veranderen. Het lijkt inherent te zijn aan de menselijke natuur om altijd dingen te willen veranderen. Dit is ook heel logisch als je bedenkt hoe we miljoenen jaren hebben overleefd: door voortdurend dingen in onszelf en onze omgeving te veranderen om de kans op overleven zo groot mogelijk te maken. Als je van bovenstaande vooronderstelling uit gaat bestaat zoiets als een 'ongemotiveerde cliënt' simpelweg niet. Het kan hooguit zo zijn dat de doelen van de cliënt niet overeen komen met de doelen van de hulpverlener. Zeker in de gedwongen hulpverlening kan dit spelen. Het kan dan enorm helpen om te bedenken dat de diepere verlangens van de cliënt vaak veel minder destructief zijn dan het daadwerkelijke gedrag. Zo bekend is een alcoholist misschien op zoek naar ontspanning en (emotionele) pijnvermindering en een jeugdige delictpleger naar erkenning door leeftijdsgenoten. Als het lukt om dit in een gesprek boven tafel te krijgen, kun je samen op zoek gaan naar effectievere en gezondere strategieën om in deze verlangens te voorzien.

2. Mensen willen liever niet veranderen

Dit klinkt natuurlijk paradoxaal na de 1e vooronderstelling. Toch zit ook hier een zekere waarheid in, want ga maar na: kennen we niet allemaal voorbeelden van mensen die -tegen beter weten in- in een

slecht huwelijk, saaie baan of destructieve leefstijl blijven zitten? En laten we eerlijk zijn: verandering is soms best eng! We weten wat we hebben, maar niet wat we krijgen. We willen eigenlijk wel de lusten, maar niet de lasten van verandering. Maar helaas, dat zit er niet in: we moeten kiezen. En daar zijn veel mensen niet zo goed in en daarom... zijn we ambivalent.

3. Mensen zijn doorgaans ambivalent ten opzichte van verandering

Eigenlijk zijn de eerste twee vooronderstellingen een opstapje voor deze, die je kunt zien als de belangrijkste vooronderstelling van motiverende gespreksvoering. Iedereen die zijn gedrag zou moeten veranderen omdat dat beter is voor de persoon zelf, de omgeving of het grotere geheel gaat namelijk door een fase van ambivalentie. Hij of zij luistert dan als het ware naar een engeltje op de ene schouder en een duiveltje op de andere. Zolang iemand nog twijfelt zal het gedrag waarschijnlijk worden voortgezet. Het gedrag is immers bekend, daardoor veilig én dikwijls belonend op de korte termijn. Iemand kan ook twijfelen of de verandering wel haalbaar is. Terugval in oud gedrag wordt dan als 'falen' gezien. Tsja, dan kun je het maar beter niet proberen. Deze fase in het veranderproces kan in het ergste geval een heel mensenleven duren. Motiverende gespreksvoering is er nu met name op gericht de ambivalentie te verhelderen en uiteindelijk op te heffen.

4. Mensen veranderen niet door wat anderen zeggen, maar door wat zij zichzelf horen zeggen in reactie op anderen

Uit deze uitspraak van Blaise Pascal, maar ook uit de zelfbepalingstheorie blijkt dat mensen gemotiveerd raken door wat ze zichzelf horen zeggen. Wij mensen zijn immers zeer veranderlijk en in constante interactie met anderen definiëren we onszelf. Als iemand zichzelf keer op keer bij een bepaalde hulpverlener of coach hoort zeggen dat hij/zij 'er nu echt klaar mee is' en 'nu echt wil stoppen met gedrag x', gaat hij zichzelf geleidelijk aan zien als iemand bij wie gedrag x niet meer hoort. Dergelijke uitlatingen worden overigens 'verandertaal' genoemd. Een grappig 'mislukt' onderzoekje dat dit principe illustreert is het volgende: op een Amerikaanse universiteitscampus wilde men onderzoeken hoe dmv. voorlichting gedrag kon worden beïnvloed. Toevallig bestond er toch al het probleem dat de studenten er veel te lang onder de douche stonden. Dus werden er tien studenten op pad gestuurd om anderen te overtuigen van het nut van korter douchen: dat was immers beter voor het milieu en voor je lichamelijke weerstand en 'als ik het kan, kun jij het ook!' Na afloop werd het douchegedrag opnieuw bekeken en wat bleek? Bij het gros was er niets veranderd, maar vreemd genoeg waren er tien studenten die opvallend veel korter waren gaan douchen...

5. Als je de autonomie van de cliënt respecteert, zal hij beter met je samen werken

Volgens de zelfbepalingstheorie is autonomie (naast competentie en verbondenheid) één van de drie psychologische basisbehoeften van de mens. Tijdens mijn studie maakte wat dat betreft een onderzoek over demente bejaarden veel indruk op mij: op de afdelingen waar men zelf nog enige autonomie had, zoals de zorg over planten, of de keuze voor een film, leefden de bejaarden gemiddeld 5 jaar langer dan op afdelingen waar hen werkelijk alle autonomie was ontnomen. Tijdens mijn werk met gedetineerden viel mij op dat autonomie voor hen zó belangrijk was, dat zij nog liever tegen hun zin 'B' deden, omdat wij 'A' hadden gezegd, dan dat zij rustig nadachten over wat voor hen de beste keuze was.

Ik zag opvallend veel overeenkomsten met het gedrag van mijn toen 3-jarige dochter: als ik bijvoorbeeld wilde dat zij haar witte jasje aandeed, kon ik het best zeggen: doe je roze jasje maar aan! Bij

motiverende gespreksvoering wordt de eigen autonomie en keuzevrijheid dan ook te allen tijde gerespecteerd en zelfs benadrukt. Alleen op deze manier kan duurzame motivatie tot verandering ontstaan.

6. Overtuigen werkt averechts

Juist vanwege de grote autonomie-behoefte werkt overtuigen averechts. Ook bot confronteren, oordelen of de 'toon van de expert' hebben dikwijls een tegengesteld effect, denk alleen al aan het verlies van rapport. Zo is uit onderzoek bij verstokte alcoholisten gebleken dat zij bij een dergelijke aanpak juist méér gingen drinken. Uit ander onderzoek, waarbij tijdens hulpverleningsgesprekken om de tien minuten van stijl werd gewisseld, dus respectievelijk overtuigen vs. reflectief luisteren, bleek dat de overtuigende stijl weerstandstaal opriep en reflectief luisteren juist verandertaal ontlokte. Motiverende gespreksvoering zoekt het dus in zaken als: oprechte belangstelling, empathie, niet-oordelen en vertrouwen op de innerlijke wijsheid van de cliënt: hij is zélf de expert over zijn leven.

Toch is het goed om te beseffen dat een heel enthousiaste aanpak hetzelfde effect kan hebben als overtuigen. Wat meer 'achteroverleunen' voorkomt niet alleen burn-out bij de hulpverlener, het is zelfs effectiever.

7. Iemand wel wil veranderen, maar er geen vertrouwen in heeft, gebeurt er niets

Iemand kan nóg zo gemotiveerd zijn om te veranderen, zolang iemand geen vertrouwen heeft in de eigen mogelijkheden en hulpbronnen hiertoe zal hij of zij niet in actie komen. Iemand is dan 'als een circus-olifant aan een dun touw'. Het schijnt namelijk dat circus-olifanten vanaf de baby-leeftijd aan een dun touw geketend zijn. Als baby is dit touw sterk genoeg, terwijl een volwassen olifant met gemak de hele circus-tent omver zou kunnen trekken. Maar dan probeert hij het niet meer... In de psychologie wordt dit fenomeen 'aangeleerde hulpeloosheid' genoemd. Om te zorgen dat de cliënt er vertrouwen in krijgt, probeert de motiverende hulpverlener naast 'verandertaal' ook 'vertrouwenstaal' te ontlokken. Hiertoe worden allerlei vragen gesteld zoals de 'wonder-vraag'.

8. Iemand accepteren zoals hij is, zorgt dat-ie verandert

Het paradoxale is dat juist als je stopt de ander te willen repareren, veranderen of redden, je de weg vrij maakt voor verandering. Ergens is dit ook wel logisch, ga maar eens na bij jezelf. Als we merken dat iemand ons helemaal accepteert zoals we zijn en orecht geïnteresseerd naar ons luistert zonder ons te willen veranderen, dan komt dit enorm het rapport ten goede. We zijn dan veel meer geneigd onze ambivalentie open en bloot op tafel te leggen. Als de coach of hulpverlener ons vervolgens liefdevol een spiegel voorhoudt, komen we vanzelf tot de conclusie: 'hé, eigenlijk wil ik zo helemaal niet leven'. Een mooi beeld vind ik dat de warmte van je empathie de verstarring van iemands probleemsituatie als het ware 'wegsmelt', zoals de zon een blok ijs

9. Meebewegen met de weerstand is effectiever dan 'de strijd aangaan'

Bij motiverende gespreksvoering wordt met weerstand omgegaan zoals men in aikido met een aanval omgaat: niet de strijd aangaan (zoals in boksen), maar soepel meebewegen zonder zelf uit balans te raken. In gesprek met een cliënt kan dit inhouden dat de positieve intentie achter het weerstandsgedrag wordt herkend en benoemd. Door het rapport (de afstemming) dat hiermee wordt opgebouwd ontstaat de ruimte om de ander vervolgens een spiegel voor te houden.

Zo kun je een ex-gedetineerde die te laat komt voor een verplichte training op twee manieren benaderen. Je kunt heel normerend vaststellen dat-ie natuurlijk te laat van huis is gegaan met waarschijnlijk meer weerstand tot gevolg. Je kunt ook zeggen: 'goh, jij hebt je natuurlijk ontzettend gehaast om hier zo snel mogelijk te zijn'. Om na de vanzelfsprekende 'ja' er aan toe te voegen: 'hé, hoe ga jij volgende keer zorgen dat je hier op tijd bent?' De kans op een constructief gesprek is dan veel groter. Deze vooronderstelling doet mij ook denken aan een oud taoïstisch verhaal: Elke morgen duikt een oude wijze man in een gevvaarlijke stroomversnelling waar al vele jonge mannen in zijn verdronken. Op de vraag hoe hij dit klaarspeelt antwoordt hij simpelweg: 'ik laat me vanaf hier meevoeren door de stroom en dan spoel ik altijd weer aan daar ginds voorbij de bocht'...

10. Uiteindelijk verandert alles en iedereen vanzelf...

Het zal u waarschijnlijk zijn opgevallen dat ik veel affiniteit heb met oosterse wijsheid. Welnu, dat is inderdaad al sinds mijn jeugd het geval en het verschaft mij dan ook veel plezier en inspiratie om in motiverende gespreksvoering een zekere geest van oosterse wijsheid te herkennen. Ik vind het persoonlijk fantastisch als 'oude wijsheid' en modern onderzoek tot dezelfde inzichten komen en dat lijkt steeds vaker het geval te zijn. Je kunt hierbij denken aan kwantumfysica en modern hersenonderzoek aan de ene kant en oude boeddhistische kennis aan de andere. In het geval van motiverende gespreksvoering kan ik dit verband alleen maar associatief onder woorden brengen. Het gaat om een zekere aanvaarding dat iedereen recht heeft op zijn eigen leerproces in zijn eigen tempo.

Het feit dat empathie en compassie een centrale plaats innemen. Het besef dat een roos niet harder gaat groeien als je hem de grond uit trekt en dat je beter de randvoorwaarden kunt scheppen waaronder een roos kan bloeien. Het inzicht dat uiteindelijk alles en iedereen vanzelf verandert, dat dit inherent is aan het leven. Dat je als hulpverlener hooguit kunt proberen het proces wat te versnellen en dat bescheidenheid hierbij op zijn plaats is. De grondlegger van motiverende gespreksvoering, William Miller, zegt in dit kader dat het beoefenen van motiverende gespreksvoering je ook als persoon niet onberoerd laat en dat het uiteindelijk meer 'een staat van zijn met je cliënt' is dan een verzameling gesprekstechnieken...

Welnu, tot zover de tien belangrijkste vooronderstellingen van motiverende gespreksvoering.

DEEL 3

Principes van motiverende gespreksvoering

Dit is het derde deel uit een serie. In het eerste deel werden m.n. de achtergronden van motiverende gespreksvoering behandeld en wat internationaal de MI-spirit (MI van Motivational Interviewing) wordt genoemd. In deel 2 kwamen de belangrijkste vooronderstellingen aan bod. Dit keer zullen we het hebben over de principes van motiverende gespreksvoering. Deze zijn voor het eerst geformuleerd in het standaardboek van Miller en Rollnick. Aangezien ik van acroniemen houd, heb ik ze lichtjes aangepast, zodat ze tezamen het woord WEED vormen. Hier zijn ze:

1. Weerstand erkennen en meebewegen (ontwijk beargumentatie)
2. Empathie uitdrukken

3. Effectiviteit vergroten
4. Discrepantie ontwikkelen

Overigens dient het acroniem slechts als geheugensteuntje en is dit niet een noodzakelijke volgorde van toepassing. In de praktijk lopen deze principes door elkaar en laat je je vooral leiden door de fase van gedragsverandering waarin de cliënt zich op dat moment bevindt (hierover later meer).

1. Weerstand erkennen en meebewegen

Weerstand: iedereen die met mensen werkt (her-)kent het fenomeen. Of het nu een ongeïnteresseerde lichaamshouding is, wat al te vaak 'ja maar' zeggen of 'schitteren in afwezigheid' de onderliggende boodschap van de cliënt is vaak: 'Ik wil dit niet' of 'ik ben het er niet mee eens'. Dit soort situaties zijn uiteraard weinig productief: het kost de veranderaar vaak veel tijd en energie en de cliënt voelt zich onbegrepen en wordt bevestigd in het alleen staan. De relatie kan schade oplopen en in het ergste geval kan het zelfs leiden tot een patstelling en/of het verbreken van het contact.

Gelukkig is 'weerstand' net als 'motivatie' geen statisch gegeven, maar een dynamisch product van de communicatie tussen veranderaar en cliënt. Allereerst kunnen wij veel doen om weerstand te voorkomen, zoals het neerzetten van een helder kader, verwachtingen uitwisselen en het opbouwen van rapport.

Desondanks zijn er situaties denkbaar waarbij weerstand zich nu eenmaal voordoet. In sommige gevallen komt de cliënt bij het eerste contact al met veel weerstand binnen, nog voordat u een woord met hem of haar heeft gewisseld. Ook later in het contact kan weerstand zich voordoen. Soms lopen de belangen te veel uiteen. Het kan echter ook zo zijn dat u te snel wilt of té veel hamert op het belang van verandering. Het is dan een natuurlijke (en gezonde) reactie van de cliënt om de hakken in het zand te zetten.

Bij motiverende gespreksvoering wordt in dergelijke situaties aangeraden om 'soepel mee te bewegen met de weerstand'. In het engels spreekt men van: 'rolling with resistance'. Het heeft veel weg van de manier waarop een aikido-beoefenaar soepel meebeweegt met een aanval (die hij overigens herkadert tot 'energie die zijn kant opkomt'). Voor alle helderheid: dit betekent niet dat u slapjes toegeeft aan de nukken van de cliënt, integendeel: u bewaakt uw eigen grenzen en doelen en hebt tegelijkertijd oog voor de belangen van de cliënt.

Nu klinkt dit allemaal heel mooi, maar hoe werkt dit nu in de praktijk? De volgende 3 stappen kunnen dit verhelderen:

1. Herken de positieve intentie achter de 'negatieve' weerstands-uiting.
2. Erken dit door het geven van een reflectie.
3. Geef er een draai aan die de cliënt aan het denken zet (bijv. een herkadering)

Een voorbeeld kan dit verhelderen: stel de cliënt zegt bij het 1e contact: 'ik zit hier alleen maar omdat ik moet van de rechter'. Een begrijpelijke maar weinig productieve gedachte bij de hulpverlener is dan: 'Zucht, alweer zo'n cliënt die niets wil! Ik zal hem eens even uitleggen hoe het hier werkt'. Dit zal echter de weerstand van de cliënt doen toenemen.

Als u de stappen toepast, zou uw reactie als volgt kunnen verlopen:

1. U bedenkt: 'hij voelt zich gedwongen en ondanks zijn tegenzin is hij hier naar toe gekomen'.
2. U zegt: 'je hebt er helemaal geen zin in en toch ben je hier naar toe gekomen.' (De kans is groot dat de cliënt bevestigend reageert, waarna u enig begrip kunt tonen)
3. U voegt er aan toe: 'goh, ik vraag me af hoe we onze tijd nuttig kunnen besteden, wat denk jij?'

Dit is slechts één techniek om met weerstand om te gaan; er zijn er te veel om in dit artikel te behandelen, maar de basis is altijd begrip voor de beleving van de cliënt, zonder zelf in te leveren op uw eigen waarden en doelen. Soms is het wel nodig uw eigen waarden en doelen tijdelijk in de wacht te zetten en eerst vooral te Luisteren (inderdaad: met een hoofdletter!)

Voordat je effectief met weerstand om kunt gaan is het een voorwaarde dat je het niet ziet als ongewenst en bedreigend, maar als iets natuurlijks. In feite is weerstand een gezonde menselijke reactie op een verandering waar iemand (nog) niet klaar voor is of die hij/zij als bedreigend ervaart. Het is vrij zinloos om daar als veranderaar tegen te vechten omdat het averechts werkt en uitputtend is en toch is dat wat we doen als we de discussie aangaan of iemand op argumenten proberen te overtuigen. Het frappante is dat in andere contexten weerstand soms als positief en zelfs noodzakelijk wordt ervaren: een danspaar bijvoorbeeld heeft enige weerstand van elkaar nodig om de ander te kunnen leiden. Een medicus spreekt van 'gezonde weerstand' als iemand niet snel ziek wordt. En een golfsurfer, tenslotte, ligt soms uren te dobberen tot er eindelijk een 'golf van weerstand' aankomt om hierop zijn kunsten te vertonen...

2. Empathie uitdrukken

Een van de grote verdiensten van Carl Rogers is dat hij het belang van empathie in de therapeutische relatie op de kaart heeft gezet. Persoonlijk vind ik het heel boeiend om te zien hoe verschillend de wegen zijn die enkele van zijn leerlingen zijn ingeslagen, terwijl er toch één toverwoord is dat hen allemaal verbindt: 'empathie'. Dit zie je terug in de provocative therapy van Frank Farrelly, in de geweldloze communicatie van Marshall Rosenberg en zeker ook in de motiverende gespreksvoering van Miller en Rollnick. Een treffende metafoor voor empathie las ik bij Irvin D. Yalom, hij noemt dit: 'uit het raam van je cliënt naar buiten kijken'. Dat is in feite ook wat je doet als je een motiverend gesprek voert met een cliënt: je bekijkt diens belevingswereld terwijl je je eigen normen en waarden even achterwege laat en je geeft terug aan de cliënt wat je ziet om te checken of dit klopt. Met name reflectief luisteren is een effectieve manier om dit te doen.

Rapport (afstemming) is een voorwaarde voor veranderwerk. Welnu, is er een krachtiger manier om rapport op te bouwen dan je cliënt te laten merken dat je diens worsteling met het leven ziet en begrijpt? Rogers benadrukte vooral het tonen van 'accurate empathie'. In plaats van: 'goh, vervelend voor je', zijn soms meer woorden nodig, zoals in dit gesprek tussen een schoolarts en een moeder en kind met Obesitas:

'Ik vat even samen om te kijken of ik je goed begrepen heb: Je maakt je orecht zorgen over de Obesitas van jezelf en je dochter omdat je weet dat het niet gezond is. Tegelijkertijd voel je je machteloos omdat het je ondanks je inzet tot nu toe niet gelukt is om jullie leefstijl te veranderen. Daarbij wil je ook geen spelbreker zijn als je dochter om snoep vraagt, vooral nu ze op school gepest wordt en daardoor niet lekker in haar vel zit. Je hebt het gevoel dat je gevangen zit in een vicieuze cirkel en je weet niet hoe je eruit kunt komen.'

Zo'n samenvatting is voor de cliënt in kwestie niet alleen een bewijs dat er écht naar haar geluisterd is, maar geeft haar ook de kans nog zaken te nuanceren of juist te benadrukken.

3. Effectiviteit vergroten

Veel mensen die ambivalent staan tegenover verandering hebben er simpelweg geen vertrouwen in dat het ze zal lukken, zelfs al is er een deel in hen dat graag wil. En als je er geen vertrouwen in hebt, waarom zou je het dan proberen? Het kan alleen maar mislukken en dan heb je er een faalervaring bij wat weer kan leiden tot groot gezichtsverlies. Als je hier niet door anderen op wordt afgerekend, dan wordt je dat wel wel door je interne criticus: 'zie je wel: ik ben gewoon een slappeling'. Kortom: iemand zover krijgen dat hij of zij wil veranderen is niet voldoende. Er dient ook gewerkt te worden aan het vertrouwen dat het in de eerste plaats überhaupt mogelijk is en in de tweede plaats ook haalbaar voor jouw specifieke persoon.

Objectieve voorlichting over de mogelijkheden tot verandering en de wegen hiernaartoe kunnen heel zinvol zijn, mits de cliënt hiervoor open staat. Daarnaast streven we met MI er niet alleen naar om verandertaal op te roepen, maar ook vertrouwenstaal: uitingen van de cliënt die er op wijzen dat er vertrouwen is dat het zal lukken. Voorbeelden van vertrouwenstaal zijn: 'ik weet dat ik het kan' of 'ik blijf het proberen tot het lukt'. De hulpverlener kan vertrouwenstaal oproepen door te putten in de hulpbronnen van de cliënt. Hier hanteert MI verschillende technieken voor, zoals het vragen naar eerdere succes-ervaringen, het onderzoeken welke kwaliteiten iemand tot een succesvolle veranderaar maken (bijv. avontuurlijk zijn) of het stellen van de wonder-vraag.

4. Discrepantie ontwikkelen

Elke hulpverlener weet hoe lastig het is om de gemiddelde mens zover te krijgen dat hij ingesleten gedragspatronen blijvend verandert. Nog veel lastiger wordt het wanneer er sprake is van verslaving: dan spelen naast ingesleten gedragspatronen immers ook factoren mee als lichamelijke afhankelijkheid, identiteit, sociale druk en (emotionele) pijnvermijding. En toch slagen er regelmatig mensen in om blijvend af te kicken van diverse verslavingen, soms zelfs na een beperkt aantal gesprekken. U kunt zich voorstellen dat daar wel iets stevigs voor nodig is, een soort hefboom die iemand echt in beweging zet. Welnu: het ervaren van 'discrepantie' door de cliënt heeft binnen MI de functie van hefboom.

Toen ik nog dagelijks met gedetineerden werkte tekende ik vaak een hond op het bord die ik in een bepaalde richting wilde laten lopen. Ik tekende dan vóór de hond een lekkere sappige worst en achter de hond een stok met een gemene spijker erin. Met de groep onderzochten we dan wat voor een ieder de stok en de worst symboliseerde én hoe je het een kon krijgen en het ander vermijden. Met MI doe je dat in feite ook: je laat de cliënt zelf ontdekken wat zijn 'stok' (pijn, zorg, angst) is en wat zijn 'worst' (zijn dromen, waarden en doelen). Het verschil tussen deze twee zou je discrepancie kunnen noemen: de pijn die iemand ervaart als écht tot hem doordringt hoe hij diep in zijn hart wil dat zijn leven er uit ziet en hoe het er in de harde realiteit uit ziet of erger nog: op termijn uit zal zien als-ie dezelfde koers aanhoudt.

In het beroemde 'Edinburgh-interview', een opname van een eerste gesprek tussen een in MI virtuoze hulpverleenster en een verstokte alcoholist zie je dit heel mooi terug. Tijdens dit gesprek ontdekt de man hoe belangrijk zijn kleinkinderen voor hem zijn én zijn wens om serieus genomen te worden in de rol van grootvader, iets wat op dat moment bepaald niet het geval is. Van deze man is bekend dat hij na

dit eerste gesprek zelf het heft in handen heeft genomen en is gestopt met drinken. Uit de vervolg gesprekken die hij heeft gehad blijkt dat dit ene gesprek blijvend zijn leven heeft veranderd en hij uiteindelijk de rol van grootvader op zich kon nemen zoals hij die wenste.

Eén manier om de discrepantie te vergroten is het geven van een 'tweezijdige reflectie'. Hiermee spiegel je in feite de ambivalentie naar de cliënt terug: 'je wilt het liefst A en toch doe je in de praktijk B'. Ter verheldering twee voorbeelden uit mijn eigen praktijk. Gedetineerden vinden hun familie vaak het allerbelangrijkste wat er is. In de praktijk echter bezorgen ze het thuisfront ontzettend veel leed, iets waar ze op het moment van delict meestal niet bij stilstaan. Een reflectie kan iemand in zo'n geval wakker schudden: 'Kees, je gezin is heilig voor je en toch kom je elke keer weer vast te zitten zodat ze er weer alleen voor staan.' Een privé-client van mij was nogal ambivalent ten opzichte van zijn rookgedrag. Hij had een baby in wiens aanwezigheid hij niet wilde roken, maar hij was nogal gehecht aan het image van 'rebel' dat hem in staat stelde zomaar een vergadering uit te lopen onder het mom van: 'ik moet even een peuk'. Wat bij hem naar eigen zeggen het meest aankwam in een gesprek was de reflectie: 'mooie rebel ben jij die met elk pakje sigaretten de staatskas spekt'.

Zelf heb ik de kracht van dit principe ervaren toen ik tijdens een live-demo in gesprek was met Frank Farrelly, een ware meester in het ontwikkelen van discrepantie. Ik was 32 en net vader geworden en wilde alsnog psychologie gaan studeren omdat ik de Algemene Sociale Wetenschappen waarin ik was afgestudeerd wel erg algemeen vond. Tegelijk besefte ik dat het een zware tol zou gaan trekken op ons prille gezinsleven. Frank moest vooral hard lachen en zei: 'who is gonna hire a 40-year old psychologist who just graduated?' Hoewel zijn reactie misschien niet zuiver MI was, was het zeer effectief: na enkele dagen van verwarring was ik voorgoed genezen van mijn verlangen om weer te gaan studeren en heb ik hier geen dag meer om getreurd. Steeds als de gedachte om weer te gaan studeren opkwam, hoorde ik in gedachten Frank weer lachen en me die ene vraag stellen....

Tot zover de principes, maar wanneer pas je nu welk principe toe? Welnu, iedereen die succesvol verandert doorloopt een aantal fasen. Elke veranderfase vraagt hierbij om een andere aanpak. De zgn voorbeschouwings-fase (er is nog geen probleem-besef) vraagt vooral om het uitdrukken van empathie en meebewegen met weerstand. De overpeinzings-fase (er ontstaat probleembesef, maar men is nog ambivalent) vraagt vooral om het ontwikkelen van discrepantie. In de besluitvormingsfase is vooral het principe 'effectiviteit vergroten' aan de orde. Onderdeel hiervan kan zijn het onderzoeken van waarden en doelen en het creëren van optimisme en vertrouwen. Hierna volgen nog de actie-fase en de volhardings-fase die vooral draaien om ondersteunen, aanmoedigen en trouble-shooten. De 6e fase is tenslotte de terugvalfase; ook die hoort erbij.

Een vooronderstelling van veel mensen is dat stoppen met een verslaving in één keer zou moeten lukken. De realiteit is echter dat mensen die succesvol stoppen een aantal cycli doorlopen waar terugval deel van uit maakt. Terugval hoort dus bij het leerproces en elke keer dat dit gebeurt is je kans groter geworden dat het de volgende keer wél lukt, mits je de moed niet opgeeft. Een hulpverlener of coach die MI toepast zal de cliënt door dit hele proces heen begeleiden en de 'mislukking' van een terugval bijvoorbeeld herkaderen tot een 'uitglijder' en 'een leerzame ervaring'.

Okee, inmiddels is het misschien tijd om toe te geven dat de titel van deze serie enigszins misleidend is: MI is niet altijd makkelijk, zeker niet als je te maken hebt met de zeer uitdagende doelgroepen waar het in eerste instantie voor ontwikkeld is. Tegelijkertijd is het alternatief nog veel moeilijker: overtuigen,

- Motiverende Gespreksvoering -

dwingen en duwen tegen iemand met de spreekwoordelijke hakken in het zand putten je uit en het effect is aversechts. Je kunt het vergelijken met leren zeilen: in het begin is dit niet altijd gemakkelijk, maar als je het eenmaal kunt levert het heel veel plezier en gemak op.

Bijlage IV

A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies

Brad W. Lundahl, Chelsea Kunz, Cynthia Brownell, Derrik Tollefson and Brian L. Burke.

Research on Social Work Practice 2010 20: 137.

A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies

Research on Social Work Practice
 20(2) 137-160
 © The Author(s) 2010
 Reprints and permission:
sagepub.com/journalsPermissions.nav
 DOI: 10.1177/1049731509347850
rswp.sagepub.com


**Brad W. Lundahl,¹ Chelsea Kunz,¹ Cynthia Brownell,¹
 Derrik Tollefson,² and Brian L. Burke³**

Abstract

Objective: The authors investigated the unique contribution motivational interviewing (MI) has on counseling outcomes and how MI compares with other interventions. **Method:** A total of 119 studies were subjected to a meta-analysis. Targeted outcomes included substance use (tobacco, alcohol, drugs, marijuana), health-related behaviors (diet, exercise, safe sex), gambling, and engagement in treatment variables. **Results:** Judged against weak comparison groups, MI produced statistically significant, durable results in the small effect range (average $g = 0.28$). Judged against specific treatments, MI produced nonsignificant results (average $g = 0.09$). MI was robust across many moderators, although feedback (Motivational Enhancement Therapy [MET]), delivery time, manualization, delivery mode (group vs. individual), and ethnicity moderated outcomes. **Conclusions:** MI contributes to counseling efforts, and results are influenced by participant and delivery factors.

Keywords

motivational interviewing; meta-analysis; review

Introduction

Motivational interviewing (MI), which originated in the early 1980s, has become a well-recognized brand of counseling. A simple literature search using the term “motivational interviewing” as the keyword in one database, PsycInfo, revealed three references during the 10-year span of 1980 to 1989, 35 references from 1990 to 1999, and 352 from 2000 to December of 2008. Interest in MI continues to grow at a rapid pace (Prochaska & Norcross, 2007), perhaps because it is short-term, teachable, and has a humanistic philosophy.

Only a brief definition of MI is given here as many other sources provide thorough explanations (e.g., Arkowitz, Westra, Miller, & Rollnick, 2008; Miller, & Rollnick, 2002; Rollnick, Miller, & Butler, 2008). MI is a counseling approach that is, at once, a philosophy and a broad collection of techniques employed to help people explore and resolve ambivalence about behavioral change. In brief, the philosophy of MI is that people approach change with varying levels of readiness; the role of helping professionals is thus to assist clients to become more aware of the implications of change and/or of not changing through a nonjudgmental interview in which clients do most of the talking. A central tenet of MI is that helping interventions are collaborative in nature and defined by a strong rapport between the professional and the client. MI is unmistakably person-centered in nature (cf., Rogers, 1951),

while also being directive in guiding clients toward behavioral change.

Professionals trained in MI generally gain knowledge and skills in four areas, consistent with the overall philosophy of MI: (a) expressing empathy, which serves many goals such as increasing rapport, helping clients feel understood, reducing the likelihood of resistance to change, and allowing clients to explore their inner thoughts and motivations; (b) developing discrepancy, which essentially means that clients argue, to themselves, reasons why they should change by seeing the gap between their values and their current problematic behaviors; (c) rolling with resistance, which means that clients’ reluctance to make changes is respected, viewed as normal rather than pathological, and not furthered by defensive or aggressive counseling techniques; and (d) supporting clients’ self-efficacy, which means that clients’ confidence in their ability to change is acknowledged as critical to successful change efforts.

¹ University of Utah

² Utah State University

³ Fort Lewis College

Corresponding Author:

Brad W. Lundahl, 395 South 1500 East, Salt Lake City, UT 84121.
 Email: Brad.Lundahl@socwk.utah.edu

Through meta-analysis, the current article examines the degree to which MI is able to help clients change. Considerable research has been applied to the question of whether MI is effective or efficacious, including primary studies, literature reviews, and meta-analyses. Indeed, many gold-standard trials have examined the question of efficacy of MI (e.g., Project Match, 1997, 1998) and several previous meta-analyses on MI have been published (Burke, Arkowitz, & Menchola, 2003; Hettema, Steele, & Miller, 2005; Vasilaki, Hosier, & Cox, 2006). While we believe these efforts have done much to enhance our understanding of MI's efficacy, we believe further investigation through meta-analytic techniques is warranted for several reasons. First, we believe a different approach to conducting a meta-analysis may reveal a "cleaner" picture of the unique contribution of MI as we delineate further below. Second, many new primary studies bearing on the effectiveness of MI have been published since the last meta-analysis, and our search yielded several articles not included in previous reviews. (Note: Studies included in this meta-analysis included both efficacy and effectiveness trials; we use the term "effectiveness" here for consistency.)

Prior to reviewing previously published meta-analyses, we briefly review the goals and methods used to conduct these types of studies (see Cooper & Hedges, 1994; Lipsey & Wilson, 2001; Lundahl & Yaffe, 2007). Meta-analysis is a method for quantitatively combining and summarizing the quantitative results from independent primary studies that share a similar focus. As most primary studies vary in the number of people who participated and the measurement tools used to assess outcomes, a meta-analysis utilizes a metric that can standardize results onto a single scale: an effect size. An effect size refers to the magnitude of the effect or the strength of the intervention. For the current meta-analysis, we used Hedge's g (a nonbiased estimate of Cohen's (1988) d) as our effect size, which is a measure of group differences expressed in standard deviation units. For example, an effect size of $d = 1.00$ would suggest positive movement of a full standard deviation of clients in the treatment group relative to the comparison group, whereas an effect size of $d = 0.50$ would suggest positive movement of a half of a standard deviation. In meta-analyses, convention holds that an effect size around the "0.20" range is small, yet statistically significant, whereas effect sizes in the "0.50" and "0.80" are moderate and large, respectively (Cohen, 1988).

In a meta-analysis, effect sizes are calculated from primary studies and then statistically combined and analyzed. In addition to describing the basic characteristics of the empirical studies of MI interventions, our review attempts to answer three questions that are commonly explored via a meta-analysis (Johnson, Mullen, & Salas, 1995). First, meta-analysis investigates the central tendency of the combined effect sizes. Second, meta-analysis is interested in understanding variability around the overall effect size. If variability is low, then the overall effect size is considered a good estimate of the average magnitude of effect across studies. If variability is high, then the overall effect size is not considered a good estimate, which leads to the third common question in meta-analysis:

what predicts the variability. To predict or understand high variability, two types of moderator analyses can be conducted: (a) an analog to the analysis of variance (ANOVA), wherein effect size differences are examined based on categorical variables within studies (e.g., treatment format, type of comparison group used), and (b) a weighted multiple regression, which uses continuous variables (e.g., treatment length) as potential predictors of the mean effect size (Borenstein, Hedges, Higgins, & Rothstein, 2005).

We now turn to a brief review of the three existing meta-analyses in the field of MI. Burke et al. (2003) published the first of these studies. These authors included 30 controlled clinical trials that focused primarily on the implementation of MI principles in face-to-face individual sessions. In terms of comparative efficacy, MI treatments were superior to no-treatment or placebo controls for problems involving alcohol, drugs, and diet and exercise, with effect sizes ranging from $d = 0.25$ to 0.57 . There was no support for the efficacy of adaptations of MI in the areas of smoking cessation and HIV-risk behaviors in the two studies available at that time. Results were near zero (0.02) in the seven studies that compared MI treatments to other active treatments, although the MI treatments were shorter than the alternative treatments by an average of 180 min (three or four sessions). Interestingly, MI effects were found to be durable across sustained evaluation periods. While only a few studies were included in the moderator analyses, Burke et al. (2003) found that higher doses of treatment and using MI as a prelude to further treatment were associated with better outcomes for MI in substance abuse studies.

Hettema et al. (2005) published the second meta-analysis that included 72 studies in which the singular impact of MI was assessed or in which MI was a component of another active treatment. Among groupings with three or more studies, effect sizes ranged from a low of $d = 0.11$ to a high of $d = 0.80$ (p. 97) across all studies, all outcomes (e.g., alcohol use, treatment compliance), and all time frames. While an overall effect sizes was provided, it may have been unduly influenced by a single outlier study that had an effect size that was more than 400% larger ($d = 3.40$) than the next largest value ($d = 0.80$). The authors also investigated several possible correlates or moderators of the outcomes, finding no relationship between outcomes and the following variables: methodological quality, time of follow-up assessment, comparison group type, counselor training, participants' age, gender composition, problem severity, or problem area. The only significant predictors of effect size for MI were as follows: manualized interventions yielded weaker effects and benefits from MI decreased significantly as follow-up times increased.

Vasilaki and colleagues (2006) published the third meta-analysis. Unlike the previous two meta-analyses that examined a wide range of behaviors, this study focused exclusively on studies of interventions that targeted excessive alcohol consumption. To be included, studies needed to claim that MI principles were adopted as well as include a comparison group and utilize random assignment. The aggregate effect size for the 15 included studies, when compared to no-treatment control

groups, was $d = 0.18$ and, when compared to other treatment groups, it was $d = 0.43$, although this difference by comparison group was not statistically significant.

Considering the converging outcomes across these three previous meta-analyses, there is sufficient evidence to support MI as a viable and effective treatment method. In many respects, the three studies point to a similar picture: outcomes tend to be in the low-to-moderate range of effect sizes and are not homogeneous. Key differences between these three meta-analyses include the fading of MI effects over time (supported by only two of the three reviews) and the moderating variables that emerged, ranging from dose and format of the treatment to manual guidance and sample ethnicity.

In the current meta-analysis, we sought to address two common shortcomings in the previous meta-analyses: (a) they ran moderator analyses with small numbers of studies and (b) they included studies that could not specifically isolate the unique effect of MI without being confounded by other treatments or problem feedback. Thus, the primary goal of the current meta-analysis was to investigate the unique effect of MI compared with other treatments or control conditions. While it can be argued that “pure” MI is not possible, given the likelihood of including other components, some studies utilize designs that allow for isolation of the unique contribution of MI or provide a direct comparison of MI to other treatments. Our review only included such studies in an effort to overcome the potential confounds found in prior meta-analyses. Furthermore, our review sought to examine and clarify the possibility of moderator effects.

Method

Literature Search

Three basic strategies were used to identify possible studies. First, we utilized a bibliography of outcome research assessing MI that was compiled by the co-founder of MI, Dr. William Miller. At the time of the literature search (2007), 167 articles were cited in the bibliography, all of which were secured and screened for eligibility. Second, we identified articles using the references cited in other meta-analyses and review studies. Third, we conducted a broad literature search using various article databases; this strategy had the most emphasis. Four search terms were used to identify articles reporting on MI. The two “brand names” most commonly used with MI were used, namely “motivational interviewing” and “motivational enhancement.” To ensure that we did not miss other articles, we also included more generic terms that involve motivational interventions, even though such interventions may not have used MI proper; the other terms were “motivational intervention” and “motivation intervention.” These four terms were entered using the connector “OR” so that any one of these terms would generate a hit.

The following 11 databases were searched: Psycinfo, PsycARTICLES, Psychology and Behavior, Medline, CINHAL, ERIC, Business Source Premier, Pub Med Academic Search Premier, Social Services Abstracts, and Sociological Abstracts.

We note that the other three meta-analyses, as far as we can discern, searched no more than four databases, which may account for the larger number of studies included in the current study.

In total, this strategy yielded 5,931 potential articles. These references were exported using Endnote software. In this process, references were categorized by author and 861 duplicates were identified and discarded. Using Endnote, the remaining 5,070 articles were screened and discarded if they were published before 1984 or were dissertations. Articles before 1984 were discarded because MI was not introduced until this date. This step removed 85 articles. We then used the Endnote to search within the remaining articles. Articles were excluded if they did not have the terms “motivational interviewing” or “motivational enhancement” in the keywords, leaving 1,288 articles. We then cross-referenced the 167 articles previously ordered from the bibliography with the articles retrieved in the basic literature search, which produced 1,128 articles that were screened for inclusion.

Screening Articles for Inclusion

The 1,128 articles were screened by their source and abstracts. Articles were retained if the abstract indicated that (a) the main principles of Motivational Enhancement Therapy (MET; see below for description) or MI were used; (b) a treatment group and a comparison group were included; (c) the intervention was delivered by humans; (d) the study was published in a peer-reviewed journal (Note: This was done to establish a more homogenous sample of studies, to facilitate potential replication by other researchers, and because searching the “gray” literature can introduce systematic sampling error); and (d) the study was reported in English. This screening strategy yielded 183 articles that were then retrieved and combined with the 167 articles taken from Miller’s bibliography.

Once the articles were obtained, they were subjected to a more rigorous screening using two criteria. First, the study design had to isolate the impact of MI on client behavior change or to provide a clear head-to-head comparison of MI to another intervention. A study was therefore included if (a) there was a comparison with waitlist or control groups, even when the effects of attention (talk time) were not controlled for (such as by mere dissemination of written materials); (b) an intervention used MI as an additive component and the comparison group also used the same intervention minus MI; (c) MI was compared to a “treatment as usual” (TAU) condition as this represents a head-to-head comparison of MI and other treatments even though the design cannot precisely isolate the impact of MI; or (d) the intervention was MET, even though this subdivision of MI includes feedback from standardized assessment measures (we used this subdivision as a possible moderator described below); or (e) the comparison group included the dissemination of written materials, such as an information pamphlet, as we reasoned that this type of comparison group is likely a hybrid between a waitlist and a TAU comparison group. Studies were excluded from this review if MI was specifically combined with another, identified intervention

and the comparison group was only a waitlist or control group. Finally, studies originating from the Project MATCH Research Group (1997, 1998) were excluded from this review, even though they represented head-to-head comparisons, because the result sections of these reports most consistently reported interaction effects whereas our meta-analysis required reporting of main effects. Thus, if we were to extract effect sizes, they would not be representative of the entire sample across all Project MATCH sites and participants resulting in systematic sampling bias.

Coding Studies: Reliability

Following the screening process, all articles were independently coded for participant characteristics and for study characteristics. Coding was conducted by graduate-level research assistants (CK and CB) under the supervision of the primary author. Average interrater reliability was high $r = .89$ for continuous variables and for categorical variables $\kappa = .86$ (Landis & Koch, 1977).

Dependent Variables: Outcomes Assessed

MI interventions have targeted a wide range of behaviors and, as expected, a wide range of measurement tools have been used to assess outcomes. Among the studies included in our review, we identified eight broad outcomes related to health. Of these, seven addressed observable behaviors: alcohol use, marijuana use, tobacco use, miscellaneous drug use (e.g., cocaine, heroin), increases in physically healthy behavior (e.g., exercise, eating patterns), reductions in risk-taking behavior (e.g., unprotected sex), and gambling. The other category included indicators of emotional or psychological well-being (e.g., depression or stress). Three other outcomes were also assessed that related more directly to client motivation: engagement in treatment (e.g., keeping appointments, participation in treatment), self-reported intention to change (e.g., movement in the Stages of Change model; Prochaska & Norcross, 2007), and self-reported confidence in one's ability to change. Finally, three other outcome groups were identified but not included beyond initial results because fewer than three studies contributed to each of the outcome groups: eating disorder behavior (binging/purging), parenting practices, and drinking potable water.

Within each broad category above, the specific dependent measures we identified were multifaceted. For example, indicators related to alcohol use include, but are not limited to, abstinence rates, relapse rates, number of drinking days per week, number of drinks consumed, number of binging episodes, blood alcohol concentration, dependency on alcohol, and/or problems arising from alcohol consumption (e.g., drinking and driving). Each indicator provides a nuanced perspective of alcohol use patterns, and different measurement tools may examine slightly different aspects of each perspective. In our review, we grouped the multifaceted aspects of a particular outcome into its broader category (e.g., alcohol use) so that the reader will have a general understanding of the value of MI.

Potential Moderators

We examined eight categorical variables and seven continuous variables as potential moderators to the effects of MI across these studies. The seven categorical variables were coded as follows.

Comparison group. Coded as one of five types: (a) waitlist/control groups that did not receive any treatment while MI was being delivered; (b) treatment as usual (TAU) without a specific treatment mentioned (e.g., groups received the typical intervention used in an agency); (c) TAU with a defined or specifically named program (e.g., 12-step program or cognitive behavioral therapy); (d) written materials given to the comparison group (e.g., pamphlet discussing the risks of unprotected sex, drug use, etc.); or (e) an attention control group wherein the comparison group received nonspecific attention.

Clients' level of distress. In an effort to estimate the degree to which MI works with populations with varying levels of distress, studies were coded into three groups: (a) significant levels of distress or impairment, which meant that most of the sample (i.e., above 50%) would qualify for a diagnosis (e.g., alcohol dependency) in a system such as the Diagnostic and Statistical Manual of Mental Disorders (*DSM*) or the International Classification of Disease (*ICD*); (b) moderate levels of distress, when a problematic behavior was targeted even though the behavior probably had not caused significant impairment in everyday functioning (e.g., occasional marijuana use, overweight college students); or (c) community sample, when the targeted behaviors were important, but the sample likely functioned well (e.g., increasing adherence to a medicine or exercise regime or increasing fruit and vegetable intake in an otherwise health sample of participants).

MI type. MI is usually delivered in one of two methods. First, "standard" or "pure" MI involves helping clients change through skills basic to MI as described above. A second way to deliver MI is one in which the client (often alcohol or drug addicted) is given feedback based on individual results from standardized assessment measures, such as the Drinker's Check Up (Miller, Sovereign, & Krege, 1988) or a modification of it; this approach is sometimes termed MET (Miller & Rollnick, 2002).

Use of a manual. Hettema et al. (2005) found that outcomes tended to be weaker when studies used a manual-guided process. If the study explicitly stated that a manual was used, above and beyond basic training in MI or MET, then it was coded as such; otherwise, studies were coded as not having used a manual.

Role in treatment. MI has been used in a variety of roles/formats in the treatment process, three of which were coded for this study as follows: (a) additive, when MI was integrated with

another treatment to provide an additive component. Again, if used in an additive fashion, the study design needed to be such that the role of MI could be isolated. For example, additive would be coded if two comparison groups examined the value of a nicotine patch and only one group used MI; (b) prelude, when MI was used as a prelude to another treatment. The format of prelude treatments was conceptually similar to an additive model, except that the MI component came before another intervention; or (c) stand-alone, when MI was used as the only treatment for that group of participants.

Fidelity to MI. Confidence that an intervention is linked to outcomes is increased when adherence or fidelity to the intervention can be established. Research teams have developed tools to measure fidelity to key principles of MI (e.g., Welch et al., 2003). Among the studies included in our meta-analyses, three levels of fidelity assessment were coded: (a) no assessment of fidelity; (b) fidelity was assessed or monitored, often through some form of taping or recording, with a qualitative system that did not produce a standardized score; (c) fidelity was assessed, often through some form of recording, using a standardized system (e.g., the MI skill code, MISC; Miller, 2002) that produced a numeric score.

Who delivered MI. As MI is being used by a variety of professional groups, we investigated whether educational background influenced outcomes. The following groups were coded whenever sufficient information was provided: (a) medical doctor; (b) registered nurse or registered dietician; (c) mental health provider with either a master's degree or a PhD; (d) mental health counselor with a bachelor's degree; or (e) student status, which generally indicates that the student was being supervised by someone with a master's or PhD degree.

Delivery mode. MI is traditionally delivered via individual counseling, though it is occasionally delivered via group format.

Continuous variables. The seven continuous variables we coded as potential moderators of MI effects can be divided into two broad categories: sample characteristics and study characteristics. Most of the continuous moderators need little explanation. Three different characteristics of the sample were coded: *participants' average age*, percentage of participants who were *male or female*, and the percentage of the sample who were *White, African American, or Hispanic*. (Note that we also coded for other racial groups but too little information existed to support analyses).

For study characteristics, we coded the *number of sessions* in which MI was delivered, the *total dosage* of MI in minutes, and *durability* by listing the longest time period in which post-treatment measures were administered. Finally, *study rigor* was also coded using an 18-point methodological quality scale (see Appendix for details).

Effect Size Calculation

Effect sizes were calculated and analyzed through Comprehensive Meta-Analysis, a software package that was produced by Borenstein, Hedges, Higgins, and Rothstein (2005). We used *Hedge's g* as our main measure of effect size, the standardized mean difference that uses an unbiased pooled standard deviation similar to *Cohen's d* but corrects for bias through calculating the pooled standard deviation in a different manner (Cooper & Hedges, 1994; Lipsey & Wilson, 2001). A random effects model was used for all analyses, which is more conservative than fixed effects models and assumes that effect sizes are likely to vary across samples and populations (Hunter & Schmidt, 2000). Effect size extraction and calculation were performed by the primary and secondary authors. Thirty-one percent of the effect sizes were double coded, with interrater reliability being very high (98% agreement).

Results

Study Characteristics

In total, 119 studies met the inclusionary criteria for this review. Of these, 10 compared two conditions of MI or two different comparison groups within the same study, and one study compared four MI groups to a single comparison group. Thus, a total of 132 MI groups were contrasted. Across these 132 group comparisons, a total of 842 effect sizes were computed because almost all of the studies reported on multiple outcomes, multiple indicators of an outcome, or multiple measurements of an outcome across time. With the exception of the meta-regression analyses (see below), multiple measures of a particular construct were averaged within studies to prevent violations of independence.

As we expected, this large body of literature varied in populations of focus, outcomes of interest, and how MI was presented to clients. Table 1 details some of the variability found in the studies, including the number of participants in the study, outcomes assessed, type of MI delivered, and the effect size for each individual study. Effect sizes in Table 1 are collapsed across dependent variables and moderators.

Overall Findings

We organized our results around the three goals of meta-analytic inquiries: central tendency, variability, and prediction (Johnson, Mullen, & Salas, 1995).

What is the overall magnitude of effect of MI interventions? The average effect size across the 132 comparisons and all outcomes was $g = 0.22$ (confidence interval [CI] 0.17-0.27), which was statistically significant, $z = 8.75$, $p < .001$. This value is consistent with Cohen's classification of a small but statistically meaningful effect. The lowest effect size for MI was -1.40 and the highest was 2.06 , neither of which were outliers. To gain a more complete picture of the distribution of effect sizes, percentile ranks are reported. The effect

Table I. Selected Study Characteristics and Average Effect Sizes

Study Name	N: Tx/Comp	Compare Group	MI or MET	Session/ Minutes	Longest Follow-up (Months)	Targeted Behavior Change	Effect Size	CI
Ahlawalia et al. (2006)	189/189	Strong	MI	6/120	7-9	Cig Al, Eng	-0.35	-0.66/-0.06
Anton et al. (2005)	39/41	Strong	MET	4/-	1-3	Al	-0.15	-0.70/0.41
Baer, Kivlahan, Blume, MacKnight, and Marlatt (2001)	164/164	Weak	MET	1/-	4 years	Al	0.31	0.06/0.56
Baker et al. (2002)	11/8	Weak	MET	1/-	10-12	Al, Mar, OD	0.01	-0.56/0.57
Baker, Heather, Wodak, Dixon, and Holt (1993)	25/27	Weak	MI	175	4-6	Risks	-0.01	-0.55/0.52
Ball et al. (2007)	34/25	Strong	MET	3/-	IM	Al	0.09	-0.37/0.56
Ball et al. (2007)	34/29	Weak	MET	3/-	IM	Al	0.21	-0.28/0.70
Baros, Latham, Moak, Voronin, and Anton (2007)	80/80	Strong	MET	4/-	1-3	Al	-0.16	-0.47/0.15
Beckham (2007)	12/13	Weak	MET	152/5	1-3	Al	0.86	0.06/1.65
Bennett et al. (2005)	66/45	Weak	MI	1/60	7-9	Health	0.18	-0.20/0.56
Bernstein et al. (2005)	70/48	Weak	MI	1/20	4-6	OD	0.13	-0.19/0.45
Bien, Miller, and Boroughs (1993)	9/12	Weak	MI	1/60	4-6	Al	0.45	-0.34/1.24
Booth, Kwiatkowski, Iguchi, Pinto, and John (1998)	95/97	Strong	MI	4/-	IM	Eng	-0.07	-0.38/0.25
Booth, Corsi, and Mikulich-Gilbertson (2004)	283/294	Strong	MI	4/-	1-3	Eng	-0.03	-0.26/0.19
Borrelli et al. (2005)	76/96	Strong	MET	4/80	10-12	Cig	0.28	-0.32/0.89
Bowen et al. (2002)	82/82	Strong	MI	3/-	10-12	Eng	0.40	-0.04/0.85
Brodie and Inoue (2005)	22/18	Strong	MI	8/480	4-6	Health	0.49	-0.14/1.11
Brown and Miller (1993)	67/64	Strong	MET	1/-	1-3	Al	1.19	0.36/2.03
Brown et al. (2006)	13/13	Strong	MET	4/-	4-6	Al, IC/SC, OD	-0.18	-0.53/0.18
Butler et al. (1999)	202/210	Weak	MI	1/60	4-6	Cig, IC/SC	0.24	-0.15/0.62
Carey et al. (2000)	24/22	Weak	MET	4/360	1-3	IC/SC	0.48	0.00/0.96
Carroll et al. (2005)	37/42	Weak	MET	1/60	1-3	Al, Eng, IC/SC, OD, Risks	0.03	-0.80/0.86
Carroll, Libby, Sheehan, and Hyland (2001)	31/29	Weak	MI	1/105	1-3	Eng	0.55	-0.09/1.18
Channon et al. (2007)	27/20	Weak	MI	4/250	13-24	Health	0.63	0.05/1.21
Colby et al. (2005)	18/20	Weak	MET	2/47.5	4-6	Cig	0.37	-0.16/0.91
Colby et al. (1998)	43/42	Weak	MI	2/52.5	4-6	Cig, IC/SC	0.48	-0.43/1.38
Connors, Walitzer, and Dermen (2002)	38/38	Strong	MET	1/90	IM	Eng	0.23	-0.22/0.67
Connors et al. (2002)	38/50	Weak	MET	1/90	10-12	Al, Eng, GWB, OD	0.44	0.02/0.87
Curry et al. (2003)	156/147	Weak	MI	5/-	10-12	Cig	0.34	-0.22/0.90
Daley, Salloum, Zuckoff, Kirisci, and Thase (1998)	11/12	Weak	MET	9/-	1-3	Eng	1.82	0.38/3.26
Davidson, Gulliver, Longabaugh, Wirtz, and Swift (2006)	76/73	Strong	MET	4/180	IM	Al	-0.09	-0.4/0.23
Davis, Baer, Saxon, and Kivlahan (2003)	Total = 73	Weak	MET	1/57	1-3	AL, Eng, GWB	0.14	-0.33/0.60
Dench and Bennett (2000)	27/24	Weak	MI	2/67.5	IM	Eng, IC/SC	0.19	-0.6/1.98
Dunn, Neighbors, and Larimer (2006)	45/45	Weak	MET	1/45	IM	ED Bx, Eng, IC/SC	0.18	-0.24/0.59
Elliot et al. (2007)	168/186	Strong	MET	4/12.5	10-12	Health	-0.13	-0.34/0.08
Elliot et al. (2007)	168/135	Weak	MET	4/12.5	10-12	Health	0.26	0.04/0.49
Emmen, Schippers, Wollersheim, and Bleijenberg (2005)	61/62	Weak	MET	2/150	4-6	Al, IC/SC	0.18	-0.21/0.57
Emmons et al. (2001)	116/120	Weak	MET	1/37.2	4-6	Cig	0.30	0.04/0.55
Galbraith (1989)	12/12	Strong	MI	1/45	10-12	A/C	0.51	-0.27/1.30
Gentilello et al. (1999)	66/307	Weak	MET	1/30	10-12	Al, Risks	0.15	-0.02/0.32
Golin et al. (2006)	30/35	Strong	MI	2/-	1-3	A/C, Al, Mar., Eng, OD	0.19	-0.28/0.66

Table I. (continued)

Study Name	N: Tx/Comp	Compare Group	MI or MET	Session/ Minutes	Longest Follow-up (Months)	Targeted Behavior Change	Effect Size	CI
Graeber, Moyers, Griffith, Guaijardo, and Tonigan (2003)	15/13 90/48	Strong Weak	MI MI	3/180 1/-	4-6 1-3	Al Al, Mar., Cig	0.69 0.13	-0.18/1.56 -0.30/0.57
Gray McCambridge, and Strang (2005)	11/7	Weak	MI	1/25	1-3	Al, Mar., Cig, IC/SC, OD	0.53	-0.92/1.98
Grenard et al. (2007)	7/7	Weak	MET	1/60	0-12	Al	0.21	-0.64/1.05
Handmaker, Miller, and Manicke (1999)	88/89	Weak	-	3/-	0-12	Health	0.40	-0.01/0.81
Harland et al. (1999)	30/23	Weak	MET	4/-	1-3	Cig, IC/SC, OD	0.34	-0.36/1.04
Haug, Svikis, and DiClemente (2004)	38/29	Strong	MET	1/-	4-6	Cig	-0.07	-0.94/0.80
Helstrom, Hutchison, and Bryan (2007)	302/285	Weak	MET	3/48	10-12	Health	0.09	-0.07/0.25
Hillsdon, Thorogood, White, and Foster (2002)	28/24	Weak	MET	1/25	13-24	Gam	0.32	-0.26/0.91
Hodgins, Currie, El-Guebaly, and Peden (2004)	31/34	Weak	MET	1/32.5	<1	Gam	0.54	0.05/1.03
Hodgins, Currie, El-Guebaly (2001)	31/33	Weak	MI	1/32.5	10-12	Gam	0.20	-0.45/0.84
Hodgins et al. (2001)	47/37	Weak	MET	1/45	4-6	Al	0.75	0.30/1.20
Hulse and Tait (2003)	58/62	Weak	MI	1/-	5 years	Al	0.14	-0.27/0.54
Hulse and Tait (2002)	45/45	Weak	MET	1/-	<1	IC/SC	0.09	-0.32/0.50
Humfress et al. (2002)	94/105	Weak	MET	1/67.5	1-3	Al	0.34	-0.21/0.88
Ingersoll et al. (2005)	26/26	Strong	MET	1/150	1-3	IC/SC, risks	0.03	-0.51/0.57
Jaworski and Carey (2001)	82/92	Weak	MI	1/20	4-6	Risks	0.19	-0.21/0.58
Johnston, Rivara, Drosch, Dunn, and Copass (2007)	21/15	Weak	MET	1/70	1-3	Al	0.20	-0.46/0.85
Juarez, Walters, Daugherty, and Radi (2006)	21/18	Weak	MET	1/60	1-3	Al	0.52	-0.13/1.17
Juarez et al. (2006)	20/15	Strong	MET	1/35	1-3	Al	-0.27	-0.94/0.40
Juarez et al. (2006)	20/18	Strong	MET	1/35	1-3	Al	-0.04	-0.68/0.60
Kahler et al. (2004)	24/24	Weak	MET	1/60	10-12	Al, Eng	0.00	-0.56/0.56
Kelly and Lapworth (2006)	28/22	Weak	MI	1/60	4-6	A/C	0.57	-0.03/1.17
Kidoff et al. (2005)	98/96	Strong	MI	1/50	1M	Eng	0.00	-0.28/0.28
Kreman et al. (2006)	12/12	Weak	MI	1/35	1-3	Health	0.22	-0.60/1.04
Kuchipudi, Hobeln, Flickinger, and Iber (1990)	45/49	Weak	MI	3/-	1-3	Al	-0.02	-0.47/0.42
Larimer et al. (2001)	64/52	Weak	MET	2/120	10-12	Al	0.19	-0.18/0.56
Litt, Kadden, and Stephens (2005)	137/128	Weak	MET	2/-	4-6	Eng	0.82	0.57/1.07
Longbaugh et al. (2001)	182/188	Weak	MET	1/50	10-12	Al	0.05	-0.15/0.26
Longbaugh et al. (2001)	169/188	Weak	MET	1/50	10-12	Al	0.16	-0.05/0.37
Longshore and Grills (2000)	40/41	Weak	MI	1/-	10-12	Al	0.41	-0.06/0.88
Maisto et al. (2001)	73/85	Weak	MET	1.5/72.5	10-12	Al	0.81	0.47/1.4
Maisto et al. (2001)	73/74	Strong	MET	1/72.5	10-12	Al	0.17	-0.17/0.52
Maltby and Tolin (2005)	7/5	Strong	MI	4/-	1M	Eng	0.73	-0.58/2.04
Marijuana tx project (2004)	128/137	Weak	MET	2/120	4-6	Mar.	0.35	0.04/0.66
Marsden et al. (2006)	166/176	Weak	MET	1/52.5	4-6	Al, Eng	-0.02	-0.23/0.19
Martino, Carroll, Nich, and Rounsaville (2006)	24/20	Strong	MET	2/120	1-3	Al, Eng, IC/SC, OD	0.00	-0.58/0.58
McCambridge and Strang (2004a)	65/81	Weak	MI	1/60	1-3	Al, Mar., Cig, OD	0.47	0.01/0.92
McCambridge and Strang (2004b)	84/78	Weak	MI	1/-	10-12	Al, Mar., Cig, OD	0.38	-0.19/0.96
Mhurchu, Margetts, and Speller (1998), 165	47/50	Weak	MI	3/-	1-3	Health	0.13	-0.27/0.53
Michael, Curtin, Kirkley, and Jones (2006)	47/44	Weak	MI	1/100	<1	Al	0.22	-0.19/0.63
Miller, Benefield, and Tonigan (1993)	14/14	Weak	MET	2/180	10-12	Al	0.35	-0.38/1.07

(continued)

Table I. (continued)

Study Name	N: Tx/Comp	Compare Group	MI or MET	Session/ Minutes	Longest Follow-up (Months)	Targeted Behavior Change	Effect Size	CI
Miller et al. (1993)	14/14	Strong	MET	2/180	10-12	AI	0.02	-0.71/0.75
Miller, Yahne, and Tonigan (2003)	108/104	Weak	MET	1/120	1-3	Eng	0.00	-0.27/0.27
Mitcheson, McCambridge, and Byrne (2007)	12/17	Weak	MI	1/-	1-3	OD	0.25	-0.47/0.98
Monti et al. (1999), 171	Total = 62	Weak	MET	1/37.5	4-6	AI	0.45	-0.01/0.91
Morgenthaler et al. (2007)	33/74	Weak	MET	4/-	10-12	AI	0.54	0.12/0.96
Mullins, Suarez, Ondersma, and Page (2004)	36/35	Strong	MI	3/180	1-3	Eng, OD	0.15	-0.89/1.20
Murphy et al. - 1 (2001)	14/12	Weak	MET	1/50	7-9	AI	0.78	0.00/1.57
Murphy et al. - 2 (2001)	14/14	Strong	MET	1/50	7-9	AI	0.94	0.18/1.71
Naar-King et al. (2006)	25/26	Weak	MET	4/240	1-3	AI, Risks, Mar.	0.41	-0.14/0.96
Nock and Kazdin (2005)	39/37	Strong	MET	6/60	IM	Eng	0.45	-0.01/0.91
Peterson, Baer, Wells, Ginzler, and Garrett (2006)	57/67	Weak	MET	3/135	1-3	AI, Mar., OD	0.01	-0.32/0.34
Picciotto et al. (2001)	46/43	Weak	MET	1/105	1-3	IC/SC, Risks	0.27	-0.14/0.69
Rohsenow, Monti, Colby, and Martin (2002)	43/43	Strong	MI	2/65	<1	Cig	-0.89	-1.88/0.09
Rosenblum, Cieland, Magura, Mahmood, and Kosanke (2005)	95/91	Strong	MET	20/800	4-6	AI, OD	-0.14	-0.42/0.15
Saitz et al. (2007)	14/146	Weak	MI	1/30	1-3	AI, Eng	0.10	-0.17/0.37
Saunders Wilkinson, and Phillips (1995)	52/49	Weak	MI	1/60	4-6	A/C, IC/SC, Eng, OD	0.20	-0.21/0.61
Schermer, Moyers, Miller, Miller, and Bloomfield (2006)	64/62	Weak	MI	1/30	3 years	AI	0.43	-0.11/0.97
Schmalzing, Blume, and Afari (2001)	16/16	Weak	MET	1/45	IM	IC/SC	0.49	-0.30/1.29
Schneider, Casey, and Kohn (2000)	30/30	Strong	MET	1/60	4-6	AI, OD	0.02	-0.46/0.51
Secades-Villa, Ferrández-Hernida, and Arnáez-Montaraz (2004)	20/20	Weak	MET	3/180	4-6	Eng	0.48	-0.21/1.17
Sellman, Sullivan, Dore, Adamson, and MacEwan (2001)	40/42	Strong	MET	4/-	4-6	AI, GWB	0.29	-0.22/0.79
Sellman et al. (2001)	40/42	Strong	MET	6/-	4-6	AI, GWB	1.20	0.64/1.76
Smith, Kratt, Heckenmeyer, and Mason (1997)	6/0	Strong	MET	19/-	4-6	Eng, Health	0.82	-0.20/1.84
Smith et al. (2001)	40/42	Weak	MI	6/-	10-12	Cig	0.09	-0.48/0.65
Soria, Legido, Escalano, Yeste, and Montoya (2006)	114/86	Weak	MET	3/60	10-12	Cig	1.00	0.32/1.69
Spirito et al. (2004)	64/60	Weak	MET	1/40	10-12	AI	0.09	-0.42/0.61
Stein, Colby, et al. (2006)	20/15	Strong	MI	1/60	1-3	AI, Mar.	0.22	-0.37/0.79
Stein, Anderson, Charuvastra, Maksad, and Friedmann (2002)	45/50	Weak	MI	2/100	4-6	AI	0.11	-0.26/0.48
Stein, Monti, et al. (2006)	69/61	Strong	MET	2/150	1-3	Eng	0.21	-0.14/0.55
Stein, Charuvastra, Maksad, and Anderson (2002)	60/49	Weak	MI	2/100	4-6	AI, risks	0.36	-0.09/0.80
Steinberg, Ziedonis, Krejci, and Brandon (2004)	32/34	Strong	MET	1/40	1-3	Eng, IC/SC	1.00	-0.02/2.02
Stephens, Roffman, and Curtin (2000)	75/79	Weak	MET	2/180	4-6	Mar.	1.20	0.81/1.59
Stephans (2004)	75/95	Strong	MET	2/180	13-24	Mar.	-0.08	-0.39/0.22
Stotts, Schmitz, Rhoades, and Grabowski (2001)	25/25	Weak	MET	2/120	IM	Eng, IC/SC, OD	-0.24/0.83	-0.24/0.83
Stotts, Delaune, Schmitz, and Grabowski (2004)	19/19	Weak	MET	4/-	IM	A/C, GWB, IC/SC	0.30	0.02/1.30
Stotts, DiClemente, and Dolan-Mullen (2002)	83/83	Weak	MET	3/54.5	4-6	Cig	0.11	-0.23/0.45
Stotts, Potts, Ingorsoll, George, and Martin (2006)	17/14	Weak	MET	2/120	<1	OD	0.77	-0.06/1.60
Tappin, Lumsden, Gilmour, et al. (2000)	48/49	Strong	MET	1/-	1-3	Cig	-0.12	-0.88/0.63
Tappin, Lumsden, McKay, et al. (2000)	48/49	Weak	MI	4/150	<1	Cig	-0.32	-1.17/0.53
Tappin et al. (2005)	35/41	Weak	MI	3.5/105	1-3	Cig	0.08	-0.27/0.43
Thevos, Kaona, Sajunza, and Quick (2000)	91/93	Strong	MI	IM	WSDP	0.73	0.31/1.15	
UKAAT (2005)	293/214	Strong	MET	3/150	10-12	AI, GWB	0.04	-0.13/0.20
Valanis et al. (2002)	127/127	Weak	MI	-	13-24	Eng	0.12	-0.18/0.41

Table I. (continued)

Study Name	N: Tx/Comp	Compare Group	MI or MET	Session/ Minutes	Longest Follow-up (Months)	Targeted Behavior Change	Effect Size	CI
Valanis et al. (2003)	126/127	Weak	MI	—	13–24	Eng	0.34	0.05/0.62
Walker, Roffman, Stephens, Berghuis, and Kim (2006)	47/50	Weak	MET	2/90	1–3	Mar.	0.31	0.11/0.74
Watkins et al. (2007)	167/172	Weak	MI	4/180	1–3	A/C	-0.01	-0.22/0.20
Weinstein, Harrison, and Benton (2004)	120/120	Weak	MI	7/-	10–12	Parenting	0.31	0.05/0.56
Westra and Dozois (2006)	25/30	Weak	MI	3/180	IM	A/C, Eng	0.54	-0.03/1.10
Wilhelm, Stephens, Hertzog, Rodehorst, and Gardener (2006)	20/20	Weak	MI	6/-	4–6	Parenting	0.21	-0.41/0.83

Note. Within a single study, authors often assessed several outcomes and the number of participants often varied; in such cases, we reported on the smallest number of participants in both the treatment and the comparison group. Strong indicates the comparison group was a specific intervention. Weak indicates the comparison group was one of the following: control, waitlist, reading materials, or TAU that was not specified. Effect sizes averaged across measures and outcomes within each study. A/C = ability or confidence to change; Al = alcohol; Cig = cigarettes and tobacco; Comp = comparison group; Ed Bx = eating disorder behavior; Eng = engagement or compliance; Gam = gambling; GWB = general well-being; IC/SC = intention to change/stages of change; IM = immediately after treatment; Health = increase healthy behavior; OD = other drugs; Risks = reduce risk taking behavior; WSDP - water—safe drinking practices. C.I. = Confidence Interval; Tx = treatment group.

size at the 25th percentile was 0.00, at the 50th percentile the effect size was 0.22, and at the 75th percentile the effect size was 0.50. Thus, 25% of the effect sizes were either neutral or negative, 50% of the effect sizes were greater than Cohen's classification of a small effect size, and 25% were larger than a medium effect size.

Given the wide variability of outcomes examined, populations targeted, and methods used to deliver and study MI, the overall effect size is likely too broad to guide clinical or administrative decision making. For that, we need to examine effect size variability.

How representative or homogeneous is the overall MI effect size? The overall effect size contained significant heterogeneity as evidenced by the within-class goodness of fit statistic, Q_w (131) = 228.71, $p < .001$. The presence of heterogeneity suggests that the findings vary based on features of participants and/or study characteristics, which can be further studied via moderator analyses.

What variables can account for the observed differences in MI effect sizes across these studies?

Step 1: Subdividing effect sizes using potential categorical moderators.

Based on findings from previous MI meta-analyses, we systematically examined potential moderators until between-group variance was eliminated, leaving homogeneous effect sizes that can confidently be interpreted.

Comparison group. We first examined the effect comparison group had on outcomes as the meta-analysis by Burke et al. (2003) suggested results varied based on this variable. In fact, significant heterogeneity was found, Q_w = 14.75 (4), $p < .01$. Further analyses (see Table 2) revealed that when MI was compared to a TAU program that involved a specific program (e.g., 12-step or cognitive-behavioral) effects were significantly lower than when compared against a waitlist/comparison group (Q_b = 18.95, $p < .001$), a generic TAU without a specific program (Q_b = 11.72, $p < .005$), or written material groups (Q_b = 4.90, $p < .05$). Group difference analyses revealed no other significant differences among or between other types of comparison groups. Next, all the "weak" comparison groups were combined ($g = 0.28$, $k = 88$) and compared to those studies that pitted MI against a specific treatment or a "strong" comparison group ($g = .09$, $k = 39$). Studies that compared MI to a weak comparison showed significantly higher effect sizes, Q_b = 13.58, $p < .001$. In addition to being interesting in its own right, this finding suggests further analyses should be run separately for those that used a strong comparison group and those that used a weak comparison group.

Dependent variable. Next, we explored whether effect sizes would differ based on the dependent variable, as it has previously been shown that MI was not equally effective for all problem types (e.g., Burke et al., 2003). Table 2 presents effect sizes organized across the 14 outcome groups with subdivisions for strong and weak comparisons. The preponderance

of studies examined outcomes related to substance use, where MI originated: alcohol ($k = 68$), miscellaneous drugs ($k = 27$), tobacco ($k = 24$), and marijuana ($k = 17$). Of the 14 outcome groups, all yielded statistically significant positive effects for MI with the exception of emotional or psychological well-being, eating problems, and confidence in being able to succeed in change. The test of heterogeneity across the 11 dependent variable groupings was nonsignificant, Q_b = 11.34 ($df = 10$), $p = 0.34$, suggesting that the outcomes across dependent variables were, on the whole, statistically homogenous. Exploratory between group analyses were conducted, and no significant group differences were found.

In line with the finding that comparison group type moderates outcomes, MI did not show significant advantage over strong comparison groups for any outcome. When positioned against a weak comparison group, outcomes for substance use-related outcomes ranged from a low of $g = 0.16$ for miscellaneous drugs to a high of $g = 0.35$ for tobacco. These values are in the small but significant range. Of the remaining health-related behavior outcomes, the strongest effect was for gambling ($g = 0.39$), though the small number of studies also made these variables the least stable as evidenced by wide confidence intervals. The effect for increases in healthy behaviors, which comprised outcomes related to diet, exercise, and compliance with medical recommendations, was in the small range ($g = 0.19$). The effect size for reducing risky behaviors, which most often comprised outcomes related to sexual behavior and drug use, was also small ($g = 0.15$). When positioned against a weak comparison group effect sizes for the three variables that concern clients' engagement in treatment ranged from a low of $g = 0.15$ for confidence to a high of $g = 0.35$ for engagement.

As was mentioned, when compared to other active, specific treatments such as 12-step or cognitive behavioral therapy MI did not produce significant nonzero effect sizes in any outcome. In the case of tobacco ($g = -0.21$) and miscellaneous drugs ($g = -0.12$), effect sizes were in the negative range, though nonsignificant. Among substance use outcomes, then, MI is certainly better than no treatment and not significantly different from other specific treatments with some effects being greater than nil and some being negative.

Client distress level. We next questioned whether clients' level of distress or impairment would moderate MI effects. Among the three different levels of distress, between group heterogeneity was not significant, Q_b = 2.39 (2), $p = .67$, meaning that distress did not moderate MI effectiveness. As can be seen in Table 2, the same pattern tended to hold where outcomes were not significant if the comparison was made against a specific treatment program.

Moderators Among Studies Comparing MI to Weak Comparison Groups. The next moderator analysis examined whether results for MI compared to weak comparison groups (i.e., nonspecific TAU, waitlist control, written materials) would depend on the method of delivery—that is, MI in its basic form versus MET, which adds specific problem feedback to MI as described

Table 2. Effect Sizes for Overall Effect and Initial Moderators

Variable	k	Effect Size	CI	z Value/p Value	Heterogeneity Q Value (df)/p Value
Overall effectiveness (across studies)	132	0.22	0.17/0.27	8.75/.001*	228.71 (131)/.001*
Moderator: comparison group type					14.75 (4)/.01*
Attention	1	0.48	0.01/0.96	1.97/.050*	
Treatment as usual—nonspecific	42	0.24	0.17/0.31	6.40/.000*	
Treatment as usual—specific	39	0.09	-0.01/0.18	1.77/.080, ns	
Waitlist/control	35	0.32	0.22/0.42	6.49/.000*	
Written material	10	0.24	0.09/0.38	3.10/.002*	
Comparisons: combined weak	88	0.28	0.22/0.34	9.85/.000*	
Comparisons: strong	39	0.09	-0.01/0.18	1.77/.080, ns	13.58 (1)/.001*
Moderator: dependent variables					18.58 (13)/.14, ns
Health-related behaviors					
Alcohol-related problems	68	0.15	0.09/0.21	4.76/.001*	
Strong comparison	21	0.03	-0.08/0.13	0.53/.597, ns	
Weak comparison	47	0.20	0.12/0.27	5.31/.000*	6.90 (1)/.009*
Marijuana-related problems	17	0.26	0.10/0.43	3.17/.002*	
Strong comparison	3	0.07	-0.15/0.29	0.64/.525, ns	
Weak comparison	14	0.30	0.11/0.49	3.10/.002*	2.35 (1)/.125, ns
Tobacco-related problems	24	0.25	0.10/0.41	3.18/.002*	
Strong comparison	5	-0.21	-0.53/0.11	-1.29/.196, ns	
Weak comparison	18	0.35	0.22/0.48	5.20/.000*	10.60 (1)/.001*
Miscellaneous drug problems	27	0.08	-0.03/0.20	1.46/.145, ns	
Strong comparison	7	-0.12	-0.27/0.04	-1.45/.146, ns	
Weak comparison	10	0.16	0.02/0.29	2.28/.023*	6.70 (1)/.010*
Increase healthy behavior	11	0.21	0.06/0.36	2.78/.006*	
Strong comparison	4	0.30	-0.19/0.79	1.20/.229, ns	
Weak comparison	7	0.19	0.08/0.30	3.30/.001*	0.20 (1)/.658, ns
Reduce risky behavior	10	0.14	0.04/0.25	2.77/.005*	
Strong comparison	1	0.10	-0.44/0.64	0.36/.716, ns	
Weak comparison	9	0.15	0.04/0.26	2.66/.008*	0.03 (1)/.855, ns
Gambling	3	0.39	0.06/0.71	2.33/.020*	
Strong comparison	3	0.39	0.06/0.71	2.33/.020*	Not applicable
Weak comparison	3	0.39	0.06/0.71	2.33/.020*	Not applicable
Emotional/psychological well-being	7	0.14	-0.02/0.30	1.67/.095, ns	
Strong comparison	3	0.05	-0.07/0.16	0.83/.408, ns	
Weak comparison	4	0.33	-0.03/0.68	1.80/.072, ns	2.11 (1)/.146, ns
Eating problems	1	0.18	-0.23/0.59	0.87/.390, ns	
Strong comparison	Not applicable				
Weak comparison	1	0.18	-0.23/0.59	0.87/.390, ns	Not applicable
Parenting practices	2	0.29	0.06/0.53	2.43/.015*	
Strong comparison	Not applicable				
Weak comparison	2	0.29	0.06/0.53	2.43/.015*	Not applicable
Drinking safe water	1	0.73	0.31/1.15	3.39/.001**	
Strong comparison	Not applicable				
Weak comparison	1	0.73	0.31/1.15	3.39/.001**	Not applicable
Approach to treatment					
Engagement	34	0.26	0.15/0.37	4.78/.001**	
Strong comparison	14	0.12	0.00/0.25	1.94/.053, ns	
Weak comparison	20	0.35	0.21/0.50	4.80/.000*	5.56 (1)/.018*
Intention to change	23	0.24	0.13/0.34	4.35/.001**	
Strong comparison	6	0.23	-0.09/0.55	1.40/.161, ns	
Weak comparison	17	0.24	0.13/0.35	4.15/.000*	0.01 (1)/.944, ns
Confidence/ability	11	0.18	-0.06/0.42	1.44/.149, ns	
Strong comparison	2	0.33	-0.08/0.74	1.50/.114, ns	
Weak comparison	9	0.15	-0.13/0.43	1.07/.286, ns	0.51 (1)/.473, ns
Moderator: clients' level of distress					2.39 (2)/.674, ns
Community sample	19	0.19	0.06/0.37	2.87/.004**	
Strong comparison	5	-0.01	-0.27/0.25	-0.09/.927, ns	
Weak comparison	14	0.28	0.17/0.39	5.12/.000*	4.14 (1)/.042*

(continued)

Table 2. (continued)

Variable	k	Effect Size	CI	z Value/p Value	Heterogeneity Q Value (df)/p Value
Moderate levels of distress	50	0.21	0.14/0.27	5.83/.001*	
Strong comparison	15	0.12	-0.01/0.25	1.79/.073, ns	
Weak comparison	35	0.24	0.15/0.32	5.55/.000*	2.40 (1)/.302, ns
Significant levels of distress	44	0.19	0.10/0.28	4.22/.001*	
Strong comparison	14	0.03	-0.12/0.17	0.35/.729, ns	
Weak comparison	30	0.26	0.16/0.35	5.08/.000*	6.47 (1)/.011*

Note. Numbers of studies vary because not all studies examined certain outcomes or reported on certain moderators. CI = confidence interval; df = degrees of freedom; k = number of studies; ns = nonsignificant. * $p < .05$.

above. Table 3 presents detailed information. MET ($g = 0.32$) was significantly more likely to produce positive change compared to typical MI ($g = 0.19$), $Q_b = 4.97$ (1), $p < .03$. Furthermore, between group comparisons were made by subdividing the groups that involved typical MI ($k = 33$) and those that involved MET ($k = 50$). Table 3 presents these results among MI studies with weak comparison groups.

Four other potential moderators were examined: whether a manual was used, format/role of MI in the treatment process, how fidelity to MI was assessed, and who delivered MI. Analyses revealed no significant heterogeneity in any of these four variables, suggesting that they did not moderate outcomes (all $ps > .05$). Because homogeneity was found within these four moderators, further between group comparisons were not conducted.

Moderators Among Studies Comparing MI to Strong Comparison Groups (Specific TAU). Moderator analyses for MI compared to specific TAU were run in the same order as those that did not involve a specific intervention above. Table 4 presents detailed data. Given the relatively smaller number of studies ($k = 40$), the power to detect moderators was reduced and the confidence intervals thus tended to be wider.

If the comparison group included a specific intervention, no significant difference was found whether MI was delivered via its typical format or MET, Q_b (1) = 0.03, ns. Thus, further moderator analyses were collapsed across these two groups. The use of a training manual ($k = 25$, $g = 0.00$) was associated with significantly smaller outcomes compared to when a manual was not used ($k = 11$, $g = 0.45$; $Q_b = 5.96$, $p < .05$), which is similar to the finding by Hettema et al. (2005). Given this difference, further moderator analyses were divided into those that did and did not use a manual. In both subgroups, the format of MI did not moderate outcomes nor did assessment of fidelity to MI or who delivered the MI intervention (all $ps > .06$).

Step 2: Examining potential continuous moderators via meta-regression. Analyses of continuous moderators were subdivided into those studies that compared MI interventions to a weak versus a strong comparison condition, as with the categorical analyses above. These results can be viewed in Table 5. Five participant characteristics were submitted to meta-regression:

participants' average age, the percent of male participants within a sample (and by converse female), and three indicators of ethnicity. With regard to ethnicity, we assessed the percentage of the sample who was White, African American, or Hispanic. Four study characteristics were submitted to meta-regression: overall study rigor, the number of sessions in which MI was delivered, the number of minutes MI was delivered to the sample, and durability (the longest length of time that a follow-up assessment was taken, which replicates the categorical analysis of time since treatment). Note that the meta-regression analyses involved all possible comparisons across studies and all moderator groups. Thus, each effect size drawn from a study was entered into the regression analyses; while this does not technically violate assumptions of independence because each effect size was compared independently, some studies contributed more data than other studies because they reported on more outcome indicators.

Studies Comparing MI to Weak Comparison Groups. Only one of the participant characteristics was significantly associated with MI outcomes: Studies that included a higher percentage of African American participants in their sample had significantly better outcomes with MI, $z = 2.90$, q value = 8.43 (1, 226), $p < .01$. Average age, percentage of male participants, and percentage of White or Hispanic participants did not significantly influence MI outcomes. With regard to study characteristics, rigor, number of sessions, and durability (measurement interval beyond completion of treatment) were not related to outcomes. By contrast, the amount of services delivered was positively related to outcomes with a significant effect ($z = 4.23$) for the total number of minutes, q value = 17.89 (1, 428), $p < .01$, such that longer treatments produced higher effect sizes for MI.

Studies Comparing MI to Strong Comparison Groups (Specific TAU). Three of the participant characteristics were significantly associated with higher effect sizes. Studies that included older participants were more likely to have positive outcomes, q value = 6.22 (1, 152), $p < .01$. Contrary to the previous regression analyses, in studies that used a TAU with a specific program, a higher percentage of African American participants was negatively associated with outcomes (q value = 29.70, $p < .001$). Moreover, a significant negative relationship was

Table 3. Moderators Among Studies Comparing MI to Weak Comparison Groups (Waitlist, Written Materials, Nonspecific Treatment as Usual)

Variable	k	Effect Size	CI	z Value/p Value	Heterogeneity Q Value (df)/p Value
Moderator: motivational interviewing (MI) or Motivational Enhancement Therapy (MET)					4.97 (1)/.032*
MI	33	0.19	0.11/0.27	4.76/.001*	
MET	50	0.32	0.23/0.40	7.51/.001*	
Moderator: use of manual					
Motivational interviewing					0.53 (1)/.459, ns
Manual not used	10	0.24	0.08/0.40	2.94/.003*	
Manual used	23	0.17	0.08/0.26	3.82/.001*	
Motivational Enhancement Therapy					
Manual not used	10	0.34	0.16/0.51	3.81/.001*	0.23 (1)/.891, ns
Manual used	39	0.32	0.22/0.41	6.26/.001*	
Moderator: role of MI in treatment					
Motivational interviewing					3.07 (2)/.218, ns
Additive	14	0.12	0.01/0.24	2.09/.040*	
Prelude	3	0.43	0.03/0.83	2.10/.040*	
Head-to-head	16	0.23	0.12/0.33	4.12/.001*	
Motivational Enhancement Therapy					3.69 (2)/.160, ns
Additive	13	0.36	0.17/0.55	3.65/.001*	
Prelude	7	0.16	-0.01/0.33	1.84/.070, ns	
Head-to-head	31	0.34	0.23/0.45	6.11/.001*	
Moderator: fidelity to MI model examined					
Motivational interviewing					5.02 (2)/.083, ns
No assessment	22	0.24	0.14/0.35	4.47/.001*	
Assessed, not scored	6	0.23	0.07/0.39	2.76/.010*	
Assessed, standardized score	5	0.03	-0.13/0.19	0.36/.720, ns	
Motivational Enhancement Therapy					3.15 (2)/.256, ns
No assessment	21	0.42	0.27/0.56	5.59/.001*	
Assessed, not scored	16	0.28	0.12/0.43	3.53/.001*	
Assessed, standardized score	12	0.25	0.14/0.37	4.38/.001*	
Moderator: Who Delivered MI					
Motivational interviewing					3.09 (3)/.389, ns
Mental health: Bachelors	1	0.19	-0.21/0.58	0.92/.360, ns	
Mental health: Masters/PhD	5	0.39	0.13/0.65	2.98/.001*	
Nurse	4	0.10	-0.11/0.31	0.93/.350, ns	
Student	3	0.23	-0.09/0.54	1.43/.150, ns	
Motivational Enhancement Therapy					0.47 (3)/.933, ns
Mental health: Bachelors	7	0.27	0.07/0.46	2.67/.008*	
Mental health: Masters/PhD	7	0.39	0.06/0.72	2.29/.022*	
Nurse	1	0.30	0.04/0.55	2.28/.022*	
Student	3	0.23	-0.13/0.59	1.25/.212, ns	

Note. Numbers of studies vary because not all studies examined certain outcomes or reported on certain moderators. CI = confidence interval; df = degrees of freedom; k = number of studies; ns = nonsignificant. * $p < .05$.

found for the percentage of White participants (q value = 6.27, $p < .01$). Thus, the higher the relative number of African American or White participants in the study (i.e., the lower the number of participants from other ethnic groups), the lower the overall mean MI effect sizes. Only one significant relationship emerged for the study characteristics in this subgroup. There was a significant negative relationship between study rigor and outcomes, q value = 8.80 (1, 253), $p < .01$, such that studies with higher rigor ratings yielded lower effect sizes for MI.

Step 3: Three further questions—treatment length, durability, and group MI

Time in treatment. To investigate whether MI is efficient compared to specific TAU or strong comparison groups, we assessed the number of appointments and total amount of time (minutes) spent in treatment. With regard to number of appointments, MI groups ($M = 3.70$, $SD = 3.82$) did not significantly differ from specific TAU groups ($M = 4.37$, $SD = 4.81$), $t(51) = 1.38$, ns. With regard to total time spent with clients (measured in minutes), specific TAU groups ($M = 308$, $SD = 447$) tended to meet for a longer time than MI groups ($M = 207$, $SD = 332$), $t(30) = 1.84$, $p < .08$, though this difference did not reach statistical significance.

Table 4. Moderator Analyses for Studies Compared to Treatment as Usual Groups With a Specific Treatment Program

Variable	K	Effect Size	CI	z Value/p Value	Heterogeneity Q Value (df)/p Value
Moderator: motivational interviewing (MI) or Motivational Enhancement Therapy					0.03 (1).867, ns
Motivational interviewing	15	0.05	-0.10/0.19	0.64/.534, ns	
Motivational Enhancement Therapy	23	0.06	-0.04/0.17	1.16/.245, ns	
Moderator: use of training manual					5.96 (1).049*
Manual used	25	0.00	-0.07/0.07	-0.08/.931, ns	
Manual not used	11	0.45	0.09/0.81	2.46/.024*	
Moderator: role of MI in treatment					
Manual used					0.95 (1).624, ns
Additive	11	-0.03	-0.16/0.10	-0.43/.667, ns	
Prelude	6	0.07	-0.08/0.22	0.91/.362, ns	
Head-to-head	8	0.02	-0.10/0.14	0.27/.392, ns	
Manual not used					5.75 (2).056, ns
Additive	4	0.10	-0.43/0.62	0.36/.721, ns	
Prelude	3	1.06	0.47/1.66	3.52/.001*	
Head-to-head	4	0.54	0.13/0.96	2.57/.014*	
Moderator: fidelity to MI model examined					
Manual used					1.28 (2).533, ns
No assessment	7	0.08	-0.06/0.21	1.12/.261, ns	
Assessed, not scored	7	-0.03	-0.22/0.17	-0.29/.767, ns	
Assessed, standardized score	11	-0.01	-0.11/0.09	-0.24/.806, ns	
Manual not used					Not applicable
No assessment	11	0.45	0.09/0.81	2.46/.013*	
Insufficient studies to make comparisons on:					
assessed, not scored and assessed, standardized score					
Moderator: who delivered MI					
Manual used					3.76 (3).294, ns
Mental health: Bachelors	5	-0.00	-0.21/0.21	-0.01/.989, ns	
Mental health: Masters/PhD	2	-0.04	-0.24/0.17	-0.36/.721, ns	
Nurse	2	0.36	0.01/0.72	1.98/.045*	
Student	2	0.05	-0.19/0.28	0.38/.715, ns	
Manual not used					1.34 (2).511, ns
Mental health: Masters/PhD	1	0.69	-0.18/1.56	1.56/.115, ns	
Nurse	1	0.52	-0.27/1.30	1.28/.204, ns	
Student	2	1.06	0.49/1.62	3.66/.001*	

Note. Numbers of studies vary because not all studies examined certain outcomes or reported on certain moderators. CI = confidence interval; df = degrees of freedom; k = number of studies; ns = nonsignificant. * $p < .05$.

Durability. To support continuous analyses of durability, outcomes were grouped into five different time frames: immediately following treatment ($g = 0.15$, $k = 15$), 3 months beyond treatment ($g = 0.14$, $k = 45$), between 4 and 12 months beyond treatment ($g = 0.29$, $k = 32$), up to 2 years beyond treatment ($g = 0.24$, $k = 3$), and 25 months or more ($g = 0.24$, $k = 2$). No significant differences emerged between time frames, $Q_b = 5.27$ (4), $p = .38$, ns. With the exception of the longest time frame, all effect sizes were significantly greater than zero (all $ps < .02$).

Delivery mode. Interest in group-delivered MI exists, yet no meta-analysis has investigated delivery mode as a moderator. We found very few studies that delivered MI in a group format (see Table 6), so we ran this analysis separately from the other moderators. Whereas no statistically significant differences were found, visual inspection suggests that delivering MI through a group format only may dilute effects compared to when MI is also delivered individually. The small number of

studies addressing this question certainly warrants caution when making inferences from these results.

Discussion

From a broad perspective, a robust literature exists that examines the ability of MI to promote healthy behavior change across a wide variety of problem areas. That 119 studies met our inclusion criteria is remarkable and suggests MI is an approach that will be part of the treatment landscape for the foreseeable future. To guide practitioners and researchers, we now pose and answer several practical questions that flow from this meta-analysis below.

Does MI Work?

To the degree that MI is rooted in health care, social work, and psychology settings, the question of “does it work” is relevant. Our analyses strongly suggest that MI does exert small though

Table 5. Meta-Regression: Continuous Moderator Analyses

	Slope	z Value	q Value (df)	p Value
Comparison groups: waitlist, TAU, and written materials				
Participant characteristics				
Average age	-0.001	-0.63	0.41 (1, 234)	.53, ns
% Male	-0.001	-0.89	0.80 (1, 224)	.37, ns
% White	0.001	0.67	0.44 (1, 319)	.51, ns
% African American	0.003	2.90	8.43 (1, 226)	.004*
% Hispanic	0.002	0.76	0.58 (1, 186)	.45, ns
Study characteristics				
Rigor	-0.010	-1.50	2.26 (1, 485)	.13, ns
Dose: # of sessions	0.015	1.30	1.68 (1, 516)	.20, ns
Dose: # of minutes	0.001	3.85	14.82 (1, 403)	.001*
Durability: F/U time	0.002	0.18	0.03 (1, 543)	.85, ns
Comparison groups: TAU with specific treatment				
Participant characteristics				
Average age	0.006	2.49	6.22 (1, 152)	.01*
% Male	-0.000	-0.19	0.05 (1, 133)	.85, ns
% White	-0.003	-2.51	6.27 (1, 213)	.01*
% African American	-0.007	-5.45	29.70 (1, 130)	.001*
% Hispanic	-0.001	-0.39	0.15 (1, 80)	.70, ns
Study characteristics				
Rigor	-0.028	-2.97	8.80 (1, 253)	.01*
Dose: # of sessions	0.003	0.30	0.09 (1, 260)	.77, ns
Dose: # of minutes	0.000	0.07	0.01 (1, 177)	.94, ns
Durability: F/U time	-0.017	-1.04	1.09 (1, 278)	.30, ns

Note. Degrees of freedom of studies vary because not all studies examined certain outcomes or reported on certain moderators. * $p < .05$.

Table 6. Mode of Delivery: Group, Individual, or Combined Delivery

	N	Effect Size	CI	z Value/p Value
Collapsed across weak and strong comparisons				
Combined	3	0.45	-0.46/1.36	0.96 (.34, ns)
Group	5	0.05	-0.19/0.28	0.38 (0.38, ns)
Individual	104	0.23	0.17/0.28	7.76 (.001*)
MI compared to weak comparison groups				
Combined	2	0.76	-1.02/2.55	0.84 (.40, ns)
Group	2	0.33	0.02/0.64	2.09 (0.04*)
Individual	76	0.28	0.22/0.34	8.89 (.001*)
MI compared to strong comparison groups				
Combined	1	0.15	0.89/1.20	0.29 (.77, ns)
Group	3	0.13	0.33/0.08	2.09 (0.23, ns)
Individual	29	0.06	0.04/0.16	1.12 (.25, ns)

Note. CI = confidence interval. Numbers of studies vary because not all studies examined certain outcomes or reported on certain moderators. * $p < .05$.

significant positive effects across a wide range of problem domains, although it is more potent in some situations compared to others, and it does not work in all cases. When examining all the effect sizes in this review, the bottom 25% included effect sizes that ranged from zero to highly negative outcomes, which means MI was either ineffective or less effective when compared to other interventions or groups about a quarter of the time. Remember, a negative effect size does not necessarily suggest that participants receiving MI were directly harmed—just that the comparison group either progressed more or regressed less. Conversely, a full 75% of participants

gained some improvement from MI, with 50% gaining a small but meaningful effect and 25% gaining to a moderate or strong level. Our results resemble findings from other meta-analyses of treatment interventions. Specially, Lipsey and Wilson (1993) generated a distribution of mean effect sizes from 302 meta-analyses of psychological, behavioral, or educational interventions, reporting the mean and median effect sizes to be around 0.50 ($SD = 0.29$). The results of our meta-analysis are generally within one standard deviation of this mean effect size, indicating that MI produces effects consistent with other human change interventions.

Should I or My Agency Consider Learning or Adopting MI?

On the whole, the data suggest “yes.” While we did not perform a cost-benefit analysis, adopting MI is very likely to produce a statistically significant and positive advantage for clients and may do so in less time. Note that, when compared to other active treatments such as 12-step and cognitive behavioral therapy (CBT), the MI interventions took over 100 fewer minutes of treatment on average yet produced equal effects. This holds across a wide range of problem areas, including usage of alcohol, tobacco, and marijuana. Furthermore, MI is likely to lead to client improvement when directed at increasing healthy behaviors and/or decreasing risky or unhealthy behaviors as well increasing client engagement in the treatment process. Of course, in MI fashion, the decision to adopt or even consider adopting MI requires considerable thought and is ultimately an individual (or agency) choice.

Is MI Only Indicated for Substance Use Problems?

No. Although MI originated in substance abuse fields, its effectiveness is currently much broader. While most of the studies included in this analysis were related to substance use problems, MI was also effective for other addictive problems such as gambling as well as for enhancing general health-promoting behaviors. Furthermore, MI was associated with positive gains in measures of general well-being (e.g., lower stress and depression levels), which is interesting because MI is geared toward motivating clients to make some form of change and directly targets clients’ engagement in the change process. Thus, it may be that MI increased client well-being indirectly, after they had made successful changes in certain areas of their life.

Is MI Successful in Motivating Clients to Change?

Yes. MI significantly increased clients’ engagement in treatment and their intention to change, the two variables most closely linked to motivation to change. MI certainly shows potential to enhance client change intentions and treatment engagement, as well as possibly boost their confidence in their ability to change.

Is MI Only Successful With Very Troubled Clients?

No. Our results suggest MI is effective for individuals with high levels of distress as well as for individuals with relatively low levels of distress. In fact, a recent study comparing MI to CBT for generalized anxiety disorder revealed that receiving MI was substantively and specifically beneficial for those reporting high worry severity at baseline, compared to those reporting severity not receiving MI (Hal Arkowitz, personal communication, November 2008).

Is MI as Successful as Other Interventions?

To begin, MI is certainly better than no treatment and weak treatment such as a written materials or nonspecific TAU

groups as judged by the significant positive changes. Furthermore, MI mostly held its own with specific TAU groups. While MI was not significantly better than such groups, it was at least as successful except in the case of tobacco use and miscellaneous drug-use problems. This finding mirrors the general “Dodo bird verdict” from psychotherapy reviews and meta-analyses that no one intervention model or theory is clearly superior (see Prochaska & Norcross, 2007). If MI is as successful as other interventions, then decision making about whether to adopt MI rests more with practical and theoretical considerations. Ease of learning MI and costs are practical concerns, whereas theoretical issues pertain to whether the individual or agency can adopt a client-centered model that emphasizes collaboration with clients over directing and pushing people to change. Of interest, MI does not require more resources, such as number of sessions or amount of time, and may require less time to achieve results similar to other specific treatments.

Are the Effects of MI Durable?

Our analyses suggest that they are. Results did not significantly differ when participants’ improvements were measured immediately following treatment, 3 months beyond treatment, or up to a year following treatment completion. This finding comes from over 97 comparisons with a minimum of 15 for each time frame; furthermore, our regression analyses showed a nonsignificant relationship across 842 effect sizes where time could be classified. Our results also suggest MI was durable at the 2-year mark and beyond, though so few studies evaluated such long-term outcomes that confidence has to be tempered pending further research.

Should Practitioners Learn “Basic MI” or “MET”?

The answer to this question depends on many factors, such as whether standardized assessment tools exist for the target problem area under consideration and whether another specific intervention is already being used. First, if the main goal of the practitioner is to combine MI with other psychotherapy techniques such as CBT (e.g., Anton et al., 2006) or use MI as in integrative framework throughout treatment for clinical problems like depression (e.g., Arkowitz & Burke, 2008), then basic MI is the best choice. If the goal is to target specific behavior changes, however, then our review suggests that if another specific program is not currently being used, employing MET will produce significantly better results than only using MI. This makes theoretical sense because MET is “MI plus,” adding a problem feedback component to the MI paradigm that could constitute an effective treatment in its own right. Furthermore, if one considers the findings originating from Project MATCH (1997, 1998), where MET produced results equal to CBT and 12-step in considerably less time, adopting MET seems like the right choice to specifically target addictive or other problem behaviors. Finally, MET may be easier to learn/train because it is more focused than basic MI.

Is Manual-Guided MI Superior to the Alternative?

Our results suggest not. When MI was compared to a weak comparison group, the use of a manual did not matter, whereas when MI was compared to a specific TAU, the use of a manual was significantly less effective. Hettema et al. (2005) found the use of a manual detracted from outcomes; our results suggest that this may be the case only when MI is being compared to a specific TAU. On one hand, treatment manuals should encourage fidelity to the MI approach, although fidelity also showed no significant correlations with MI outcome. Yet, MI by definition strives toward a humanistic, client-centered approach where a manual may interfere with truly centering on the client by causing practitioners to focus unduly on the manual. To our knowledge, no primary study has explicitly tested this question in a MI context and we hope future research into the process of MI will do so.

Does the Format or Role of MI Influence Outcomes?

MI is a versatile approach. It has been used as additive to other interventions, as a prelude to another treatment where the assumption is that MI will serve a preparatory role, and as a stand-alone intervention. Our data suggest that MI format does not matter as judged by homogenous effect sizes. However, visual inspection revealed a fair amount of variability across different conditions, suggesting that basic MI may work best as a prelude to further treatment (as in Burke et al., 2003), whereas MET may be optimal as an additive or stand-alone intervention.

The overall finding that format of MI does not significantly influence its outcome fits with its basic philosophy. MI aims to improve the working alliance with a client, to manage resistance, to express empathy, and to build motivation to change while addressing ambivalence about change. These targeted goals seem broadly acceptable to most change efforts and are likely useful at any stage of an intervention process. Thus, it appears that one of the strengths of MI lies in its portability across many different treatment formats or roles.

Does Level of Training Influence Success of MI?

Our data suggest "no." However, very few studies contributed data to this question, and any inferences must be made tentatively. Of note, William Miller has stated (personal communication, December 2006) that what is most important is a helping professional's ability to empathize with clients and not their training background (e.g., nursing, social work, psychology). Moreover, research has often suggested that little difference can be attributed to professional training in psychological arenas (e.g., Berman & Norton, 1985).

Does MI Dosage Matter?

Our answer is that it likely does. When MI conditions were compared to weak (and shorter) alternatives, a significant positive relationship was found, suggesting a dose effect—i.e.,

more treatment time was related to better outcomes for MI. The data therefore suggest that it cannot hurt to provide more MI and that it is unreasonable to assume that a very short MI intervention will lead to lasting change. That said, our data cannot suggest minimum or maximum levels of MI-related contact. Many MI practitioners anecdotally report that MI becomes integrated within much of their treatment, such that it cannot be separated from other interventions, which thereby makes the question of dosage less pertinent.

Does MI Work for Most Clients?

We cannot provide a simple response to this important question based on our review, although our data do suggest a few insights in that regard. On the whole, MI appears broadly capable of helping across many problem domains ranging from addictive to health-promoting behaviors. We also looked at two participant characteristics: age and ethnicity. Regression analyses showed a significant relationship between participants' average age and outcomes only when MI was compared to specific TAU, where studies with older participants yielded better results for MI. Considering developmental issues, MI is conducted within a cognitive medium and requires some degree of abstract reasoning that should be present after the age of 12 years (based on Piaget's (1962) model) and thus may not be as helpful for preteen children.

Our data also provide a mixed picture with regard to race. When MI was compared with a weak alternative, a significant positive correlation was found between percentages of African American participants and, to a lesser degree, Hispanic Americans for MI outcomes. Furthermore, when MI was compared to a strong alternative (specific TAU), a lower percentage of Whites and a lower percentage of African Americans (i.e., a higher percentage of other minorities) was significantly related to better MI outcomes. Taken together, these findings suggest that MI may be particularly effective with clients from minority ethnic groups (but not necessarily African Americans), a pattern similar to that reported by Hettema et al. (2005). We conjecture that MI may be particularly attractive to groups who have experienced social rejection and societal pressure because MI adopts a humanistic approach that prizes self-determination, although why results would differ by comparison group type is not clear to us at this juncture.

Does MI Work in Group Formats?

Limited data can be applied to this question because only eight studies used some form of group delivery; however, our interpretation of the data is that relying solely on group-delivered MI would be a mistake. While no statistically significant differences emerged based on delivery mode (individual, group, or combined), visual inspection of Table 6 seems to discourage group-only delivery and may favor a combined approach instead.

In summary, the combined results of the present meta-analysis as well as those previously published meta-analyses suggest a relatively low risk in implementing MI because it

works across a wide range of problem behaviors/types and is unlikely to harm clients. Compared to other active and specific treatments, MI was equally effective in our review and shorter in length. When compared to weaker alternatives—such as waitlist, control groups, nonspecific TAU, or written material—MI provides a small yet significant advantage for a diverse array of clients regardless of symptom severity, age, and gender, with possibly an even stronger advantage for minority clients.

It is our sense that MI enjoys a clear and articulate theoretical frame accompanied by specific techniques that can readily be learned (e.g., Arkowitz & Miller, 2008; Markland, Ryan, Tobin, & Rollnick, 2005; Miller & Rollnick, 2004; Vansteenkiste & Sheldon, 2006). Indeed, a rather large body of training materials and trainers for MI has emerged along with mounting research addressing training effectiveness (e.g., see Burke, Dunn, Atkins, & Phelps, 2004), resulting in a rather standardized training approach (see motivationalinterviewing.org). Moreover, MI researchers are also investing much time and energy into best practices in training MI (Teresa Moyers, personal communication, November 2008) and efforts to assess fidelity to MI are well underway (e.g., Miller, 2002). Furthermore, MI has been judged to be an evidenced-based practice by organizations such as SAMHSA (Substance Abuse and Mental Health Service Administration). In sum, 25 years of MI research has generated broad scientific inquiry and deep scrutiny, and the MI approach has clearly passed the initial test.

The results of our meta-analysis suggest several potentially fruitful avenues for future MI research. In this review, we made the point that MI may well be more cost-effective than viable alternative treatments even if they are not more clinically effective. While only a handful of MI studies have examined this important variable to date, cost-effectiveness research would certainly add significantly to the MI literature and would be of special interest to policy makers and clinical administrators alike.

Furthermore, although a substantial amount of thought, practice, and research has already been devoted to MI, we still do not understand the precise links between its processes and outcomes (Burke et al., 2002). MI may work via increasing a specific type of client change talk—what they say in session about their *commitment* to making behavioral changes—and decreasing client speech that defends the status quo (Amrhein, Miller, Yahne, Palmer, & Fulcher et al., 2003). Consistent with its client-centered background, MI may also work through therapist interpersonal skills (such as accurate empathy as measured by the MISC; Miller, 2002), which are positively associated with client involvement as defined by cooperation, disclosure, and expression of affect (Moyers, Miller, & Hendrickson et al., 2005). Thus, there may be two specific active components underlying the MI mechanism: a *relational* component focused on empathy and the interpersonal spirit of MI, both of which minimize client resistance, and a *technical* component involving the differential evocation and reinforcement of client change talk (Miller & Rose, 2009).

Finally, a considerable body of theory and research suggests that MI may be effective for clinical areas beyond the addictions, such as for depression and anxiety disorders (Arkowitz et al., 2008). Our review is supportive of such an assertion because virtually anytime MI has been tested empirically in new areas (e.g., health-promoting behaviors); it has shown positive and significant effects. Thus, we have likely not yet found the limits of the types of problems and symptoms to which MI can be profitably applied.

Authors' Note

The first and last authors are affiliated with the MINT group and may, therefore, be biased. To control for this bias we explicitly instructed our research team that positive and negative findings were welcomed and expected. Further, we consciously determined to present the results regardless of whether they supported or undermined MI's effectiveness. Lastly, we strove to clearly detail our methodology to be transparent and to encourage possible replication.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Funding

The Utah Criminal Justice Center, housed within the University of Utah, funded two research assistants (CK, CB) for this project.

Acknowledgments

Thanks to the Utah Criminal Center who paid for the RAs; thanks to the J. Willard Marriott Library.

Appendix

Rating Study Rigor

Studies received 1-point if they did the following: reported on three or more demographic indicators of the sample, collected data at a follow-up period beyond immediate completion of the study, included more than one site, reported data from all dependent variables they assessed, utilized coders who were "blind" to participants' group assignment, utilized objective measurement tools (e.g., records, physiological indicators) instead of relying solely on client self-report, utilized a manual to direct training or standardized delivery, reported on drop-outs, and included more than 20 participants in the intervention and comparison groups. Studies earned up to 2 points if the data used to calculate effect sizes came from means, standard deviations, and/or numbers of participants (percentages), 1 point if an exact statistic was used (e.g., *t* test), and no point if effect sizes were derived from *p* values. Studies earned 2 points if measurement of outcomes came from at least two sources (e.g., participant and collateral source), 1 point if collateral only, and no point if participant only. Studies earned 2 points if fidelity was assessed and considered high, 1 point if fidelity was assessed but not scored, and no point if fidelity was not measured. Lastly, studies earned 3 points if true randomization was used, 2 points if matched groups were used, 1 point if the

groups were tested for pretreatment equivalence, and no point if groups were not equivalent or equivalence could not be determined.

References

- References marked with an asterisk "*" indicate studies included in the meta-analysis.
- *Ahluwalia, J. S., Okuyemi, K., Nollen, N., Choi, W. S., Kaur, H., Pulvers, K., et al. (2006). The effects of nicotine gum and counseling among African American light smokers: A 2 x 2 factorial design. *Addiction*, 101, 883-891.
 - Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcome. *Journal of Consulting and Clinical Psychology*, 71, 862-878.
 - *Anton, R. F., Moak, D. H., Latham, P., Waid, L. R., Myrick, H., Voronin, K., et al. (2005). Naltrexone combined with either cognitive behavioral or motivational enhancement therapy for alcohol dependence. *Journal of Clinical Psychopharmacology*, 25, 349-357.
 - Anton, R. F., O'Malley, S. S., Ciraulo, D. A., Cisler, R. A., Couper, D., & Donovan, D. M. et al. (2006). Combined pharmacotherapies and behavioral interventions for alcohol dependence. The COMBINE study: A randomized controlled trial. *Journal of the American Medical Association*, 295, 2003-2017.
 - Arkowitz, H., & Burke, B. L. (2008). Motivational interviewing as an integrative framework for the treatment of depression. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems*, (pp. 145-172). New York: Guilford.
 - Arkowitz, H., & Miller, W. (2008). Learning, applying, and extending motivational interviewing. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems*, (pp. 1-25). New York: Guilford.
 - Arkowitz, H., Westra, H. A., Miller, W. R., & Rollnick, S. (2008). *Motivational interviewing in the treatment of psychological problems*. New York: Guilford.
 - *Baer, J. S., Kivlahan, D. R., Blume, A. W., MacKnight, P., & Marlatt, G. A. (2001). Brief intervention for heavy-drinking college students: 4-year follow up and natural history. *American Journal of Public Health*, 91, 1310-1316.
 - *Baker, A., Heather, N., Wodak, A., Dixon, J., & Holt, P. (1993). Evaluation of a cognitive-behavioral intervention for HIV prevention among injecting drug users. *AIDS*, 7, 247-256.
 - *Baker, A., Lewin, T., Reichler, H., Clancy, R., Carr, V., Garret, R., et al. (2002). Evaluation of a motivational interview for substance use within psychiatric in-patient services. *Addiction*, 97, 1329-1337.
 - *Ball, S. A., Todd, M., Tennen, H., Armeli, S., Mohr, C., Affleck, G., et al. (2007). Brief motivational enhancement and coping skills interventions for heavy drinking. *Addictive Behaviors*, 32, 1105-1118.
 - *Baros, A. M., Latham, P. K., Moak, D., Voronin, K., & Anton, R. F. (2007). What role does measuring medication compliance play in evaluating the efficacy of Naltrexone? *Alcoholism: Clinical and Experimental Research*, 31, 596-603.
 - *Beckham, N. (2007). Motivational interviewing with hazardous drinkers. *Journal of the American Academy of Nurse Practitioners*, 19, 103-110.
 - *Bennett, J. A., Perrin, N. A., Hanson, G., Bennett, D., Gaynor, W., Flaherty-Robb, M., et al. (2005). Healthy aging demonstration project: Nurse coaching for behavior change in older adults. *Research in Nursing and Health*, 28, 187-197.
 - Berman, J. S., & Norton, N. C. (1985). Does professional training make a therapist more effective? *Psychological Bulletin*, 98, 401-407.
 - *Bernstein, J., Bernstein, E., Tassiopoulos, K., Heeren, T., Levenson, S., & Hingson, R. (2005). Brief motivational intervention at a clinic visit reduces cocaine and heroin use. *Drug and Alcohol Dependence*, 77, 49-59.
 - *Bien, T. H., Miller, W. R., & Borroughs, J. M. (1993). Motivational interviewing with alcohol outpatients. *Behavioral and Cognitive Psychotherapy*, 21, 347-356.
 - *Booth, R. E., Corsi, K. F., & Mikulich-Gilbertson, S. K. (2004). Factors associated with methadone maintenance treatment retention among street-recruited injection drug users. *Drug and Alcohol Dependence*, 74, 177-185.
 - *Booth, R. E., Kwiatkowski, C., Iguchi, M., Pinto, F., & John, D. (1998). Facilitating treatment entry among out-of-treatment injection drug users. *Public Health Reports*, 113, 117-129.
 - Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2005). Comprehensive Meta-Analysis (Version 2) [Computer software]. Englewood, NJ: Biostat.
 - *Borrelli, B., Novak, S., Hecht, J., Emmons, K., Papandonatos, G., & Abrams, D. (2005). Home health care nurses as a new channel for smoking cessation treatment: Outcomes from project CARES (Community-nurse Assisted Research and Education on Smoking). *Preventive Medicine*, 41, 815-821.
 - *Bowen, D., Ehret, C., Pedersen, M., Snetselaar, L., Johnson, M., Tinker, L., et al. (2002). Results of an adjunct dietary intervention program in the woman's health initiative. *Journal of the American Dietetic Association*, 102, 1631-1637.
 - *Brodie, D. A., & Inoue, A. (2005). Motivational interviewing to promote physical activity for people with chronic heart failure. *Journal of Advanced Nursing*, 50, 518-527.
 - *Brown, J. M., & Miller, W. R. (1993). Impact of motivational interviewing on participation and overcome in residential alcoholism treatment. *Psychology of Addictive Behavior*, 7, 211-218.
 - *Brown, T. G., Dongier, M., Latimer, E., Legault, L., Seraganian, P., Kokin, M., et al. (2006). Group-delivered brief intervention versus standard care for mixed alcohol/other drug problems: A preliminary study. *Alcoholism Treatment Quarterly*, 24, 23-40.
 - Burke, B., Arkowitz, H., & Dunn, C. (2002). The efficacy of motivational interviewing. In W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing: Preparing people for change* (2nd ed. pp. 217-250). New York: Guilford.
 - 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.

- Burke, B. L., Dunn, C. W., Atkins, D., & Phelps, J. S. (2004). The emerging evidence base for motivational interviewing: A meta-analytic & qualitative inquiry. *Journal of Cognitive Psychotherapy, 18*, 309-322.
- *Butler, C. C., Rollnick, S., Cohen, D., Bachman, M., Russell, I., & Stott, N. (1999). Motivational consulting versus brief advice for smokers in general practice: A randomized trial. *British Journal of General Practice, 49*, 611-616.
- *Carey, M. P., Baaten, L. S., Maisto, S. A., Gleason, J. R., Forsyth, A. D., Durant, L. E., et al. (2000). Using information, motivational enhancement, and skills training, to reduce the risk of HIV infection for low-income urban women: A second randomized clinical trial. *Health Psychology, 19*, 3-11.
- *Carroll, K. M., Ball, S. A., Nich, C., Martino, S., Frankforter, T. L., Farentinos, C., et al. (2005). Motivational interviewing to improve treatment engagement and outcome in individuals seeking treatment for substance abuse: a multisite effectiveness study. *Drug and Alcohol Dependence, 81*, 301-312.
- *Carroll, K. M., Libby, B., Sheehan, J., & Hyland, N. (2001). Motivational interviewing to enhance treatment initiation in substance abusers: An effectiveness study. *The American Journal on Addictions, 10*, 335-339.
- *Channon, S. J., Huws-Thomas, M. V., Rollnick, S., Hood, K., Cannings-John, R. L., Rogers, C., et al. (2007). A multicenter randomized controlled trial of motivational interviewing in teenagers with diabetes. *Diabetes Care, 30*, 1390-1395.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- *Colby, S. M., Monti, P. M., Barnett, N. P., Rosenhow, D. J., Weissman, K., & Spirito, A. et al. (1998). Brief motivational interviewing in a hospital setting for adolescent smoking: A preliminary study. *Journal of Consulting and Clinical Psychology, 66*, 574-578.
- *Colby, S. M., Monti, P. M., Tevyaw, T. O., Barnett, N. P., Spirito, A., Rosenhow, D. J., et al. (2005). Brief motivational intervention for adolescent smokers in medical settings. *Addictive Behaviors, 30*, 865-874.
- *Connors, G. J., Walitzer, K. S., & Dermen, K. H. (2002). Preparing clients for alcoholism treatment: Effects on treatment participation and outcomes. *Journal of Consulting and Clinical Psychology, 70*, 1161-1169.
- Cooper, H., & Hedges, L. V. (1994). *The handbook of research synthesis*. New York: Russell SAGE.
- *Curry, S. J., Ludman, E. J., Graham, E., Stout, J., Grothaus, L., & Lozano, P. (2003). Pediatric-based smoking cessation intervention for low-income based women. *Archives of Pediatrics and Adolescent Medicine, 157*, 295-302.
- *Daley, D. C., Salloum, I. M., Zuckoff, A., Kirisci, L., & Thase, M. E. (1998). Increasing treatment adherence among outpatients with depression and cocaine dependence: Results of a pilot study. *American Journal of Psychiatry, 155*, 1611-1613.
- *Davidson, D., Gulliver, S. B., Longabaugh, R., Wirtz, P. W., & Swift, R. (2006). Building better cognitive-behavioral therapy: Is broad-spectrum treatment more effective than motivational enhancement therapy for alcohol-dependent patients treated with Naltrexone? *Journal of Studies on Alcohol and Drugs, 68*, 238-247.
- *Davis, T. M., Baer, J. S., Saxon, A. J., & Kivlahan, D. R. (2003). Brief motivational feedback improves post-incarceration treatment contact among veterans with substance use disorders. *Drug and Alcohol Dependence, 69*, 197-203.
- *Dench, S., & Bennett, G. (2000). The impact of brief motivational intervention at the start of an outpatient day programme for alcohol dependence. *Behavioral and Cognitive Psychotherapy, 28*, 121-130.
- *Dunn, E. C., Neighbors, C., & Larimer, M. E. (2006). Motivational enhancement therapy and self-help treatment for binge eaters. *Psychology of Addictive Behaviors, 20*, 44-52.
- *Elliot, D. L., Goldberg, L., Kuehl, K. S., Moe, E. L., Breger, R. K. R., & Pickering, M. A. (2007). The PHLAME (Promoting Healthy Lifestyles: Alternative Model's Effects) firefighter study: Outcomes of two models of behavior change. *Journal of Occupational and Environmental Medicine, 49*, 204-213.
- *Emmen, M. J., Schippers, G. M., Wollersheim, H., & Bleijenberg, G. (2005). Adding psychologist's intervention to physician's advice to problem drinkers in the outpatient clinic. *Alcohol & Alcoholism, 40*, 219-226.
- *Emmons, K. M., Hammond, K., Fava, J. L., Velicer, W. F., Evans, J. L., & Monroe, A. D. (2001). A randomized trial to reduce passive smoke exposure in low income households with young children. *Pediatrics, 108*, 18-24.
- *Gailbraith, I. G. (1989). Minimal intervention with problem drinkers: A pilot study of the effect of two interview styles on perceived self-efficacy. *Health Bulletin, 47*, 311-314.
- *Gentilello, L. M., Rivara, F. P., Donovan, D. M., Jurkovich, G. J., Daranciang, E., Dunn, C. W., et al. (1999). Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Annals of Surgery, 230*, 473-483.
- *Golin, C. E., Earp, J., Tien, H. C., Stewart, P., Porter, C., & Howie, L. (2006). A 2-arm, randomized, controlled trial of a motivational interviewing-based intervention to improve adherence to antiretroviral therapy (ART) among patients failing or initiating ART. *Journal of Acquired Immune Deficiency Syndromes, 42*, 42-51.
- *Graeber, D. A., Moyers, T. B., Griffith, G., Guajardo, E., & Tonigan, S. (2003). A pilot study comparing motivational interviewing and an educational intervention in patients with schizophrenia and alcohol use disorders. *Community Mental Health Journal, 39*, 189-202.
- *Gray, E., McCambridge, J., & Strang, J. (2005). The effectiveness of motivational interviewing delivered by youth workers in reducing drinking, cigarette and cannabis smoking among young people: Quasi-experimental pilot study. *Alcohol & Alcoholism, 40*, 535-539.
- *Grenard, J. L., Ames, S. L., Wiers, R. W., Thush, C., Stacy, A. W., & Sussman, S. (2007). Brief intervention for substance use among at risk adolescents: A pilot study. *Journal of Adolescent Health, 40*, 188-191.
- *Handmaker, N. S., Miller, W. R., & Manicke, M. (1999). Findings of a pilot study of motivational interviewing with pregnant drinkers. *Journal of Studies on Alcohol, 60*, 285-287.

- *Harland, J., White, M., Drinkwater, C., Chinn, D., Farr, L., & Howell, D. (1999). The Newcastle exercise project: a randomized controlled trial of methods to promote physical activity in primary care. *British Medical Journal*, 319, 828-832.
- *Haug, N. A., Svikis, D. S., & DiClemente, C. (2004). Motivational enhancement therapy for nicotine dependence in methadone-maintained pregnant women. *Psychology of Addictive Behaviors*, 18, 298-292.
- *Helstrom, A., Hutchison, K., & Bryan, A. (2007). Motivational enhancement therapy for high-risk adolescent smokers. *Addictive Behaviors*, 32, 2404-2410.
- Hettema, J., Steele, J., & Miller, W. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91-111.
- *Hillsdon, M., Thorogood, M., White, I., & Foster, C. (2002). Advising people to take more exercise is ineffective: A randomized controlled trial of physical activity promotion in primary care. *International Journal of Epidemiology*, 31, 808-815.
- *Hodgins, D. C., Currie, S. R., & El-Guebaly, N. (2001). Motivational enhancement and self-help treatments for problem gambling. *Journal of Consulting and Clinical Psychology*, 69, 50-57.
- *Hodgins, D. C., Currie, S., El-Guebaly, N., & Peden, N. (2004). Brief motivational treatment for problem gambling: A 24-month follow-up. *Psychology of Addictive Behaviors*, 18, 293-296.
- *Hulse, G. K., & Tait, R. J. (2002). Six month outcomes associated with a brief alcohol intervention for adult in-patients with psychiatric disorders. *Drug and Alcohol Review*, 21, 105-112.
- *Hulse, G. K., & Tait, R. J. (2003). Five year outcomes of a brief alcohol intervention for adult inpatients with psychiatric disorders. *Addiction*, 98, 1061-1068.
- *Humfress, H., Igel, V., Lamont, A., Tanner, M., Morgan, J., & Schmidt, U. (2002). The effect of a brief motivational intervention on community psychiatric patients' attitudes to their care, motivation to change, compliance and outcome: A case control study. *Journal of Mental Health*, 11, 155-166.
- Hunter, J. E., & Schmidt, F. L. (2000). Fixed effects versus random effects meta-analysis models: Implications for cumulative research knowledge. *International Journal of Selection and Assessment*, 8, 275-292.
- *Ingersoll, K. S., Ceperich, S. D., Nettleman, M. D., Karanda, K., Brocksen, S., & Johnson, B. A. (2005). Reducing alcohol-exposed pregnancy risk in college women: Initial outcomes of a clinical trial of a motivational intervention. *Journal of Substance Abuse Treatment*, 29, 173-180.
- *Jaworski, B. C., & Carey, M. P. (2001). Effects of a brief, theory-based STD-prevention program for female college students. *Journal of Adolescent Health*, 29, 417-425.
- Johnson, B. T., Mullen, B., & Salas, E. (1995). Comparison of three major meta-analytic approaches. *Journal of Applied Psychology*, 80, 94-106.
- *Johnston, B. D., Rivara, F. P., Droesch, R. M., Dunn, C., & Copass, M. K. (2007). Behavior change counseling in the emergency department to reduce injury risk: A randomized controlled trial. *Pediatrics*, 110, 267-274.
- *Juarez, P., Walters, S. T., Daugherty, M., & Radi, C. (2006). A randomized trial of motivational interviewing and feedback with heavy drinking college students. *Journal of Drug Education*, 36, 233-246.
- *Kahler, C. W., Read, J. P., Ramsey, S. E., Stuart, G. L., McCrady, B. S., & Brown, R. A. (2004). Motivational enhancement for a 12-step involvement among patients undergoing alcohol detoxification. *Journal of Consulting and Clinical Psychology*, 72, 736-741.
- *Kelly, A. B., & Lapworth, K. (2006). The HYP program- targeted motivational interviewing for adolescent violations of school tobacco policy. *Preventive Medicine*, 43, 466-471.
- *Kidorf, M., Disney, E., King, V., Kolodner, K., Beilenson, P., & Brooner, R. K. (2005). Challenges in motivating treatment enrollment in community syringe exchange participants. *Journal of Urban Health*, 82, 457-465.
- *Kreman, R., Yates, B. C., Agrawal, S., Fiandt, K., Briner, W., & Shurmur, S. (2006). The effects of motivational interviewing on physiological outcomes. *Applied Nursing Research*, 19, 167-170.
- *Kuchipudi, V., Hoben, K., Flickinger, A., & Iber, F. L. (1990). Failure of a 2-hour motivational intervention to alter recurrent drinking behavior in alcoholics with gastrointestinal disease. *Journal of Studies on Alcohol*, 51, 356-360.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159-174.
- *Larimer, M. E., Turner, A. P., Anderson, B. K., Fader, J. S., Kilmer, J. R., Palmer, R. S., et al. (2001). Evaluating a brief alcohol intervention with fraternities. *Journal of Studies on Alcohol*, 62, 370-380.
- Lipsey, M., & Wilson, D. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.
- Lipsey, M. W. & Wilson, D. B. (2001). *Practical meta-analysis*. Applied Social Research Methods Series (Vol. 49). Thousand Oaks, CA: SAGE Publications.
- *Litt, M. D., Kadden, R. M., & Stephens, R. S. (2005). Coping and self-efficacy in marijuana treatment: Results from the marijuana treatment project. *Journal of Consulting and Clinical Psychology*, 73, 1015-1025.
- *Longabaugh, R., Woolard, R. F., Nirenberg, T. D., Minugh, A. P., Becker, B., Clifford, P.R., et al. (2001). Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department. *Journal of Studies on Alcohol*, 62, 806-817.
- *Longshore, D., & Grills, C. (2000). Motivating illegal drug use recovery: Evidence for a culturally congruent intervention. *Journal of Black Psychology*, 26, 288-301.
- Lundahl, B. W., & Yaffe, J. (2007). Use of meta-analysis in Social Work and allied disciplines. *Journal of Social Service Research*, 33, 1-11.
- *Maisto, S. A., Conigliaro, J., McNeil, M., Kraemer, K., Conigliaro, R. L., & Kelley, M. E. (2001). Effects of two types of brief intervention and readiness to change on alcohol use in hazardous drinkers. *Journal of Studies on Alcohol*, 62, 605-614.
- *Maltby, N., & Tolin, D. F. (2005). A brief motivational intervention for treatment-refusing OCD patients. *Cognitive Behavioral Therapy*, 34, 176-184.
- *Marijuana Treatment Project Research Group. (2004). Brief treatments for cannabis dependence: Findings from a randomized

- multisite trial. *Journal of Consulting and Clinical Psychology*, 72, 455-466.
- Markland, D., Ryan, R., Tobin, V., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of Social & Clinical Psychology*, 24, 811-831.
- *Marsden, J., Stillwell, G., Barlow, H., Boys, A., Taylor, C., Hunt, N., et al. (2006). An evaluation of a brief motivational intervention among young ecstasy and cocaine users: No effect on substance and alcohol use outcomes. *Addiction*, 101, 1014-1026.
- *Martino, S., Carroll, K. M., Nich, C., & Rounsaville, B. J. (2006). A randomized controlled pilot study of motivational interviewing for patients with psychotic and drug use disorders. *Addiction*, 101, 1479-1492.
- *McCambridge, J., & Strang, J. (2004a). Deterioration over time in effect of motivational interviewing in reducing drug consumption and related risk among young people. *Addiction*, 100, 470-478.
- *McCambridge, J., & Strang, J. (2004b). The efficacy of a single-session motivational interviewing in reducing drug consumption and perceptions of drug related risk and harm among young people: Results from a multi-site cluster randomized trial. *Addiction*, 99, 39-52.
- Mhurchu, C. N., Margetts, B. M., & Speller, V. (1998). Randomized clinical trial comparing the effectiveness of two dietary interventions for patients with hyperlipidaemia. *Clinical Science*, 95, 479-487.
- *Michael, K. D., Curtin, L., Kirkley, D. E., & Jones, D. L. (2006). Group-based motivational interviewing for alcohol use among college students: An exploratory study. *Professional Psychology: Research and Practice*, 37, 629-634.
- Miller, W. R. (2002). *Motivational interviewing skill code (MISC) coder's manual*. Retrieved November 2, 2008, from <http://motivationalinterview.org/training/MISC2.pdf>
- *Miller, W. R., Benefield, 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.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York: Guilford.
- Miller, W. R., & Rollnick, S. (2004). Talking oneself into change: Motivational interviewing, stages of change, and the therapeutic process. *Journal of Cognitive Psychotherapy*, 18, 299-308.
- Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist*, 64, 527-537.
- Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The drinker's check-up as a preventive intervention. *Behavioural Psychotherapy*, 16, 251-268.
- *Miller, W. R., Yahne, C. E., & Tonigan, S. (2003). Motivational interviewing in drug abuse services: A randomized clinical trial. *Journal of Counseling and Clinical Psychology*, 71, 754-763.
- *Mitcheson, L., McCambridge, J., & Byrne, S. (2007). Pilot cluster-randomized trial of adjunctive motivational interviewing to reduce crack cocaine use in clients on methadone maintenance. *European Addiction Research*, 13, 6-10.
- *Monti, P. M., Colby, S. M., Barnett, N. P., Spirito, A., Rohsenow, D. J., & Myers, M. et al. (1999). Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. *Journal of Consulting and Clinical Psychology*, 67, 989-994.
- *Morgenstern, J., Parsons, J. T., Bux Jr., D. A., Irwin, T. W., Wainberg, M. L., Muench, F., et al. (2007). A randomized controlled trial of goal choice interventions for alcohol use disorders among men who sex with men. *Journal of Counseling and Clinical Psychology*, 75, 72-84.
- Moyers, T. B., Miller, W. R., & Hendrickson, S. M. L. (2005). How does motivational interviewing work? Therapist interpersonal skill predicts client involvement within motivational interviewing sessions. *Journal of Consulting and Clinical Psychology*, 73, 590-598.
- *Mullins, S. M., Suarez, M., Ondersma, S. J., & Page, M. C. (2004). The impact of motivational interviewing on substance abuse treatment retention: A randomized control trial of women involved with child welfare. *Journal of Substance Abuse Treatment*, 27, 51-58.
- *Murphy, J. G., Duchnick, J. J., Vuchinich, R. E., Davison, J. W., Karg, J. W., Olson, A. M., et al. (2001). Relative efficacy of a brief motivational intervention for college student drinkers. *Psychology of Addictive Behaviors*, 15, 373-379.
- *Naar-King, S., Wright, K., Parsons, J. T., Frey, M., Templin, T., Lam, P., et al. (2006). Healthy choices: Motivational enhancement therapy for health risk behaviors in HIV-positive youth. *AIDS Education and Prevention*, 18, 1-11.
- *Nock, M. K., & Kazdin, A. E. (2005). Randomized controlled trial of a brief intervention for increasing participation in parent management training. *Journal of Consulting and Clinical Psychology*, 73, 872-879.
- *Peterson, P. L., Baer, J. S., Wells, E. A., Ginzler, J. A., & Garrett, S. B. (2006). Short-term effects of a brief motivational intervention to reduce alcohol and drug risk among homeless adolescents. *Psychology of Addictive Behaviors*, 20, 254-264.
- Piaget, J. (1962). The stages of the intellectual development of the child. *Bulletin of the Menninger Clinic*, 26, 120-128.
- *Picciano, J. F., Roffman, R. A., Kalichman, S. C., Rutledge, S. E., & Berghuis, J. P. (2001). A telephone based brief intervention using motivational enhancement to facilitate HIV risk reduction among MSM: A pilot study. *AIDS and Behavior*, 5, 251-262.
- Prochaska, J. O., & Norcross, J. C. (2007). *Systems of psychotherapy: A transtheoretical approach*. South Melbourne, Australia: Thompson Brooks/Cole.
- Project MATCH Research Group. (1997). Matching alcoholism treatment to client heterogeneity: Project MATCH post treatment drinking outcomes. *Journal of Studies on Alcohol*, 58, 7-29.
- Project MATCH Research Group. (1998). Matching alcoholism treatment to client heterogeneity: Project MATCH three-year drinking outcomes. *Alcoholism: Clinical and Experimental Research*, 23, 1300-1311.
- Rogers, C. R. (1951). *Client centered therapy*. Boston: Houghton Mifflin.
- *Rohsenow, D. J., Monti, P. M., Colby, S. M., & Martin, R. A. (2002). Brief interventions for smoking cessation in alcoholic smokers. *Alcoholism: Clinical and Experimental Research*, 26, 1950-1951.
- Rollnick, S., Miller, W. R., & Butler, C. C. (2008). *Motivational interviewing in health care: Helping patients change behavior*. New York: Guilford.

- *Rosenblum, A., Cleland, C., Magura, S., Mahmood, D., & Kosanke, N. (2005). Moderators of effects of motivational enhancements to cognitive behavioral therapy. *The American Journal of Drug and Alcohol Abuse*, 31, 35-58.
- *Saitz, R., Palfal, T. P., Cheng, D. M., Horton, N. J., Freedner, N., Dukes, K., et al. (2007). Brief intervention for medical inpatients with unhealthy alcohol use. *Annals of Internal Medicine*, 146, 167-176.
- *Saunders, B., Wilkinson, C., & Phillips, M. (1995). The impact of a brief motivational intervention with opiate users attending a methadone programme. *Addiction*, 90, 415-424.
- *Schermer, C. R., Moyers, T. B., Miller, T. B., Miller, W. R., & Bloomfield, L. A. (2006). Trauma center brief interventions for alcohol disorders decrease subsequent driving under the influence arrests. *The Journal of Trauma Injury, Infection, and Critical Care*, 60, 29-34.
- *Schmaling, K. B., Blume, A. W., & Afari, N. (2001). A randomized controlled pilot study of motivational interviewing to change attitudes about adherence to medications for asthma. *Journal of Clinical Psychology in Medical Settings*, 8, 167-171.
- *Schneider, R. J., Casey, J., & Kohn, R. (2000). Motivational versus confrontational interviewing: A comparison of substance abuse assessment practices at employee assistance programs. *The Journal of Behavioral Health Services and Research*, 27, 60-74.
- *Secades-Villa, R., Fernández-Hermida, J. R., & Arnáez-Montaraz, C. (2004). Motivational interviewing and treatment retention among drug user patients: A pilot study. *Substance Use and Misuse*, 39, 1369-1378.
- *Sellman, J. D., Sullivan, P. F., Dore, G. M., Adamson, S. J., & MacEwan, I. (2001). A randomized controlled trial of motivational enhancement therapy (MET) for mild to moderate alcohol dependence. *Journal of Studies on Alcohol*, 62, 389-396.
- *Smith, D. E., Kratt, P. P., Heckenmeyer, C. M., & Mason, D. A. (1997). Motivational interviewing to improve adherence to a behavioral weight-control program for older obese women with NIDDM. *Diabetes Care*, 20, 52-53.
- *Smith, S. S., Jorenby, D. E., Fiore, M. C., Anderson, J. E., Mielke, M. M., & Beach, K. E. et al. (2001). Strike while the iron is hot: Can stepped-care treatments resurrect relapsing smokers? *Journal of Counseling and Clinical Psychology*, 69, 429-445.
- *Soria, R., Legido, A., Escolano, C., Yeste, A. L., & Montoya, J. (2006). A randomised controlled trial of motivational interviewing for smoking cessation. *British Journal of General Practice*, 56, 768-774.
- *Spirito, A., Monti, P. M., Barnett, N. P., Colby, S. M., Sindelar, H., & Rosenhow, D. J. (2004). A randomized clinical trial of a brief motivational intervention for alcohol-positive adolescents treated in an emergency department. *The Journal of Pediatrics*, 145, 396-402.
- *Stein, M. D., Anderson, B., Charuvastra, A., Maksad, J., & Friedmann, P. D. (2002). A brief intervention for hazardous drinkers in a needle exchange program. *Journal of Substance Abuse Treatment*, 22, 23-31.
- *Stein, M. D., Charuvastra, A., Maksad, J., & Anderson, B. J. (2002). A randomized trial of a brief alcohol intervention for needle exchangers (BRAINE). *Addiction*, 97, 691-700.
- *Stein, L. A. R., Colby, S. M., Barnett, N. P., Monti, P. M., Golembeske, C., & Lebeau-Craven, R. (2006). Effects of motivational interviewing for incarcerated adolescents on driving under the influence after release. *The American Journal on Addictions*, 15, 50-57.
- *Stein, L. A. R., Monti, P. M., Colby, S. M., Barnett, N. P. Golembeske, C., & Lebeau-Craven, R. (2006). Enhancing substance abuse treatment engagement in incarcerated adolescents. *Psychological Services*, 3, 25-34.
- *Steinberg, M. L., Ziedonis, D. M., Krejci, J. A., & Brandon, T. H. (2004). Motivational interviewing with personalized feedback: A brief intervention for motivating smokers with schizophrenia to seek treatment for tobacco dependence. *Journal of Consulting and Clinical Psychology*, 72, 723-728.
- *Stephens, R. S., Roffman, R. A., & Curtin, L. (2000). Comparison of extended versus brief treatments for marijuana use. *Journal of Consulting and Clinical Psychology*, 68, 898-908.
- *Stotts, A. L., DeLaune, K. A., Schmitz, J. M., & Grabowski, J. (2004). Impact of a motivational intervention on mechanisms of change in low-income pregnant smokers. *Addictive Behaviors*, 29, 1649-1657.
- *Stotts, A. L., DiClemente, C. C., & Dolan-Mullen, P. (2002). One-to-one: A motivational intervention for resistant pregnant smokers. *Addictive Behaviors*, 27, 275-292.
- *Stotts, A. L., Potts, G. F., Ingersoll, G., George, M. R., & Martin, L. E. (2006). Preliminary feasibility and efficacy of a brief motivational intervention with psychophysiological feedback for cocaine abuse. *Substance Abuse*, 27, 9-20.
- *Stotts, A. L., Schmitz, J. M., Rhoades, H. M., & Grabowski, J. (2001). Motivational interviewing with cocaine with cocaine-dependent patients: A pilot study. *Journal of Consulting and Clinical Psychology*, 69, 858-862.
- *Tappin, D. M., Lumsden, M. A., Gilmour, W. H., Crawford, F., McIntyre, D., Stone, D. H., et al. (2005). Randomised controlled trial of home based motivational interviewing by midwives to help pregnant smokers quit or cut down. *British Medical Journals*, 331, 373-377.
- *Tappin, D. M., Lumsden, M. A., McIntyre, D., McKay, C., Gilmour, W. H., Webber, R., et al. (2000). A pilot study to establish a randomized trial methodology to test the efficacy of a behavioural intervention. *Health Education Research: Theory and Practice*, 15, 491-502.
- *Tappin, D. M., Lumsden, M. A., McKay, C., McIntyre, D., Gilmour, H., Webber, R., et al. (2000). The effect of home-based motivational interviewing on the smoking behavior of pregnant women: A pilot randomized controlled efficacy study. *Ambulatory Child Health*, 6, 34-35.
- *Thevos, A. K., Kaona, F. A. D., Siajunza, M. T., & Quick, R. E. (2000). Adoption of safe water behaviors in Zambia: Comparing educational and motivational approaches. *Education for Health*, 13, 366-376.
- *UKAAT (United Kingdom Alcohol Treatment Trial) Research Team. (2005). Effectiveness of treatment for alcohol problems: Findings of the randomised UK alcohol treatment trial. *British Medical Journal*, 331, 541-544.

- *Valanis, B., Glasgow, R. E., Mullooly, J., Vogt, T., Whitlock, E. E., Boles, S. M., et al. (2002). Screening HMO women overdue for both mammograms and pap tests. *Preventive Medicine, 34*, 40-50.
- *Valanis, B., Whitlock, E. E., Mullooly, J., Vogt, T., Smith, S., Chen, C., et al. (2003). Screening rarely screened women: Time-to-service and 24-month outcomes of tailored interventions. *Preventive Medicine, 37*, 442-450.
- Vansteenkiste, M., & Sheldon, K. (2006). There's nothing more practical than a good theory: Integrating motivational interviewing and self-determination theory. *British Journal of Clinical Psychology, 45*, 63-82.
- Vasilaki, E., Hosier, S., & Cox, W. (2006). The efficacy of motivational interviewing as a brief intervention for excessive drinking: A meta-analytic review. *Alcohol and Alcoholism, 41*, 328-335.
- *Walker, D. D., Roffman, R. A., Stephens, R. S., Berghuis, J., & Kim, W. (2006). Motivational enhancement therapy for adolescent marijuana users: A preliminary randomized controlled trial. *Journal of Consulting and Clinical Psychology, 74*, 628-632.
- *Watkins, C. L., Auton, M. F., Deans, C. F., Dickinson, H. A., Jack, C. I. A., Lightbody, E., et al. (2007). Motivational interviewing early after acute stroke: A randomized, controlled trial. *Stroke, 38*, 1004-1009.
- *Weinstein, P., Harrison, R., & Benton, T. (2004). Motivating parents to prevent caries in their young children: One year findings. *Journal of the American Dental Association, 135*, 731-738.
- Welch, G., Rose, G., Hanson, D., Lekarcyk, J., Smith-Ossman, S., Gordon, T., et al. (2003). Changes in Motivational Interviewing Skills Code (MISC) scores following motivational interviewing training for diabetes educators. *Diabetes, 52*, A421.
- *Westra, H. A., & Dozois, D. J. A. (2006). Preparing clients for cognitive behavioral therapy: A randomized pilot study of motivational interviewing for anxiety. *Cognitive Therapy and Research, 30*, 481-498.
- *Wilhelm, S. L., Stephans, M. B. F., Hertzog, M., Rodehorst, T. K. C., & Gardener, P. (2006). Motivational interviewing to promote sustained breastfeeding. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35*, 340-348.

Bijlage V

'Motivational Interviewing'

Jennifer Hettema, Julie Steele, and William R. Miller

Annual Review Clin. Psychol. 2005. 1:91–111

MOTIVATIONAL INTERVIEWING

Jennifer Hettema, Julie Steele, and William R. Miller

Department of Psychology, University of New Mexico, Albuquerque, New Mexico 87131-1161; email: jhettema@unm.edu, jmsteele@unm.edu, wrmiller@unm.edu

Key Words substance abuse, health behavior, treatment outcome, meta-analysis, counseling

■ Abstract Motivational interviewing (MI) is a client-centered, directive therapeutic style to enhance readiness for change by helping clients explore and resolve ambivalence. An evolution of Rogers's person-centered counseling approach, MI elicits the client's own motivations for change. The rapidly growing evidence base for MI is summarized in a new meta-analysis of 72 clinical trials spanning a range of target problems. The average short-term between-group effect size of MI was 0.77, decreasing to 0.30 at follow-ups to one year. Observed effect sizes of MI were larger with ethnic minority populations, and when the practice of MI was not manual-guided. The highly variable effectiveness of MI across providers, populations, target problems, and settings suggests a need to understand and specify how MI exerts its effects. Progress toward a theory of MI is described, as is research on how clinicians develop proficiency in this method.

CONTENTS

INTRODUCTION	92
META-ANALYTIC METHODS	94
Study Identification and Coding	94
Computing Effect Sizes	95
Comparison of Problem Areas, Comparison Group, and Motivational Interviewing Purity	95
Analysis of Motivational Interviewing Efficacy Across Time	96
Homogeneity Analyses	96
RESULTS	96
Characteristics of Included Trials	96
TREATMENT EFFECTS OF MOTIVATIONAL INTERVIEWING	99
General Observations	99
Correlates of Effect Size	101
Effects of Motivational Interviewing by Problem Domain	102
DISCUSSION	103
Treatment Adherence	103
Immediacy of Effect	104
Are Manuals a Good Idea?	104
Matching Indications	105

TOWARD A THEORY OF MOTIVATIONAL INTERVIEWING	105
LEARNING MOTIVATIONAL INTERVIEWING	108
SUMMARY	109

INTRODUCTION

Anyone who aspires to help others change will quickly discover that people are often less than “ready, willing, and able” to do so. The “able” part of this formula is comfortable territory for most cognitive-behavior therapists, who are quite prepared to help clients build self-efficacy and learn how to change through a rich armamentarium of effective coping strategies. Less familiar is the terrain of readiness. Often clients are expected to come already prepared with sufficient motivation for change. In substance abuse treatment, it was once common to tell less-motivated clients, “Come back when you’re ready.”

Yet, hesitancy about change is human nature. To be sure, clients present with a wide range of readiness. Some do come already convinced that something has to change. Others come reluctantly or grudgingly, nudged through the door by loved ones or the courts. It is a safe assumption that most clients seeking treatment or change are ambivalent about it: They want it, and they don’t.

Motivational interviewing (MI) was developed as a way to help people work through ambivalence and commit to change (Miller 1983). An evolution of client-centered therapy, MI combines a supportive and empathic counseling style (Rogers 1959) with a consciously directive method for resolving ambivalence in the direction of change. Drawing on Bem’s self-perception theory (Bem 1972) that people tend to become more committed to that which they hear themselves defend, MI explores the client’s own arguments for change. The interviewer seeks to evoke this “change talk”—expressions of the client’s desire, ability, reasons, and need for change—and responds with reflective listening. Clients thus hear themselves explaining their own motivations for change, and hear them reflected again by the counselor. Furthermore, the counselor offers periodic summaries of change talk that the client has offered, a kind of bouquet composed of the client’s own self-motivational statements (Miller & Rollnick 2002).

The net effect of evoking change talk in an empathic and supportive manner is to strengthen the client’s commitment to change. Verbalized intention results in an increased probability of behavior change, particularly when it is combined with a specific plan for implementation (Gollwitzer 1999). In psycholinguistic analyses of MI sessions with drug dependent people, we found that the strength of commitment language predicted drug abstinence. Stated desire, ability, reasons, and need for change all contributed to subsequent strength of commitment language, but only commitment directly predicted behavior change (Amrhein et al. 2003). To say that one wants to, can, has cause to, or needs to change is not the same as making a commitment or stating the intention to change. MI is therefore differentiated into two phases: the first is focused on increasing motivation for change, and the second on consolidating commitment (Miller & Rollnick 2002).

MI is normally brief, provided in one to two sessions. It can be delivered as a freestanding intervention, or as a motivational prelude to other treatment. It has also been common to combine the clinical method of motivational interviewing with other intervention components, which have been called adaptations of MI (AMIs) (Burke et al. 2003). The most widely used AMI is motivational enhancement therapy (MET), which combines MI with personal feedback of assessment results (Miller et al. 1992).

Like other psychotherapies, MI is a complex and skillful method that is learned over time. Counselors sometimes come to MI workshops expecting to learn tricks for getting people to do what counselors want them to do. On the contrary, MI is a systematic and collaborative method for helping people to explore their own values and motivations, and how these may be served by status quo or behavior change. It emphasizes and honors client autonomy, to choose whether, when and how to change. When done well, MI involves listening more than telling. It does not operate from a deficiency model that seeks to instill knowledge, insight, skills, correct thinking, or even motivation. Rather, the counselor seeks to evoke the client's own motivation, with confidence in the human desire and capacity to grow in positive directions. Instead of implying that "I have what you need," MI communicates, "You have what you need." In this way, MI falls squarely within the humanistic "third force" in the history of psychotherapy. Nevertheless, MI is compatible with a variety of other approaches and appears to amplify the efficacy of treatment methods with which it is combined.

Proficiency in MI is not readily acquired by reading about it, viewing videotapes, or attending a clinical workshop (Miller & Mount 2001). Proper training focuses instead on helping clinicians learn how to learn MI from their clients. Once counselors learn to recognize and evoke change talk and committing language, clients thereafter provide continuous and immediate in-session reinforcement for good practice. Client resistance, on the other hand, represents immediate feedback of dissonance and serves as a cue to shift strategies. Within MI, "resistance" is simply client speech that defends and expresses commitment to status quo; in other words, it reflects the other side of the client's ambivalence. Pushing against resistance tends to focus on and amplify it. Instead, the interviewer acknowledges and rolls with resistance, calling attention to both sides of the ambivalence and redirecting the emphasis toward change.

MI differs from client-centered counseling in its directive intention. Some have maintained that Rogers himself was unconsciously directive, differentially attending to and reinforcing certain types of client speech (Truax 1966). In MI, such differential response to change talk is conscious and strategic. This means, of course, that MI is appropriate when there is a clear desired direction for change. That direction may come from the client's own expressed desires, from the counselor's perspective, or from the context within which counseling occurs. Interesting ethical dilemmas can arise when therapists and clients disagree on the perception of a problem and the need to change. MI has been argued to lie on a continuum between passivity and coercion and seeks to resolve mismatches between clients

and counselors by evoking the clients' intrinsic motivations (Miller 1994, Miller & Rollnick 2002).

Research indicates that MI is particularly useful with clients who are less motivated or ready for change, and who are more angry or oppositional. For these populations, action-oriented counseling with a goal of behavior change is likely to evoke resistance and reactance. From a transtheoretical perspective, this happens because of a mismatch in stages of change: The counselor is working at the action stage, whereas the client is in the earlier precontemplation or contemplation stage (Prochaska & DiClemente 1984). In the case of clients who are less ready for change, MI meets them where they are and invites them to move along through contemplation, preparation, and action. For clients who indicate readiness to change, MI may be less useful, and some findings indicate that it can be counterproductive. If such clients subsequently show ambivalence in action-oriented counseling, one can always fall back to an MI style.

The treatment outcome literature for MI is growing rapidly and has spread well beyond its original focus on addictive behaviors. Our primary purpose in this chapter is to provide an up-to-date summary of the evidence base for MI, drawing data primarily, but not exclusively, from controlled clinical trials. The findings that we summarize here are based on a new meta-analysis, the full scope of which is beyond the space limitations of this chapter. Full details of the meta-analysis and a comprehensive bibliography of MI are available at <http://www.motivationalinterview.org/>.

META-ANALYTIC METHODS

Study Identification and Coding

In order to identify MI treatment outcome studies, we searched PsycINFO using the term "motivational interviewing," and hand-searched bibliographies from the motivational interviewing web page (<http://www.motivationalinterview.org/>) and previous reviews (Burke et al. 2003, Dunn et al. 2001, Miller & Wilbourne 2003). Studies having (a) at least one group or individual intervention with components of MI, and (b) at least one posttreatment outcome measure were included in the overall pool for analyses investigating within-group effect sizes. In addition, studies contributing between-group effect sizes required (c) at least one control condition or comparison intervention without any components of MI, and (d) a procedure to provide pretreatment equivalence of groups (e.g., randomization, cohort, or sequential group assignment).

All outcome studies were independently coded by the first two authors (J. Hettema and J. Steele). The characteristics of included studies (type, goal, format, setting, intervention agent, treatment components, and sample characteristics) were categorized using a coding manual from prior treatment outcome reviews (Miller & Wilbourne 2003), with adaptations for the specific content of MI. Classification discrepancies were resolved by consensus of the coders, with reference to the original article and coding manual. All studies were also rated using 12 methodological

quality criteria from the same coding system, including method for assignment to groups, presence of quality control of treatment, follow-up rate, follow-up duration, type of follow-up data collection, collateral verification of self-report, objective verification of follow-up data, inclusion of treatment dropouts in analyses, consideration of cases lost to follow-up, masked follow-up data collection, acceptable statistical analyses, and the inclusion of multiple sites. Total methodological quality scores were computed, with a possible range from 0 to 16. In addition, we coded information on the amount and type of MI training provided to interventionists, and specific components of MI reported to have been included in the interventions.

Computing Effect Sizes

For each study, effect sizes and confidence intervals were computed for all outcome variables related to the target problem, and for which sufficient information was provided. As feasible, study authors were contacted for missing information. When no other option was available, effect sizes reported in previously published meta-analyses were used (Bien et al. 1993, Burke et al. 2003, Dunn et al. 2001). When insufficient information was provided to determine effect sizes and significance tests indicated $p > 0.05$, zero effect sizes were assigned.

When calculating within-group effect sizes, baseline mean values of all included variables were compared to every follow-up point. For between-group calculations, mean MI scores on every included variable were compared to every other investigated treatment condition at all follow-up points. When mean, standard deviation, and sample size information were reported, an unbiased estimator of effect size (g) was calculated using the following formula (Hedges & Olkin 1985): $[g = J(N - 2) * (Y^E - Y^C/s)]$, where $J(N - 2)$ is a bias correction factor, Y^E and Y^C are the experimental and control group means, and s is the pooled sample standard deviation. When mean, standard deviation, or sample size information was not provided, effect sizes were estimated from significance tests. F, t, or chi-square statistics were transformed to r values and then converted to effect sizes (d) using the following formula (Rosenthal 1991): $[d = 2r/SQRT(1 - r^2)]$. For all effect sizes, 95% confidence intervals were then calculated using the following formula (Hedges & Olkin 1985, p. 86): $\sigma^2(d) = \{(n^E + n^C)/(n^E n^C)\} + \{d^2/2(n^E + n^C)\}$. In addition, we calculated for each study a combined effect size (d_c), averaging all variables at each follow-up point using weighted linear combinations (Hedges & Olkin 1985, pp. 109–117). To minimize the variance of the combined effect sizes, weights that were inversely proportional to the variance of each effect size were assigned to each variable included in the analyses.

Comparison of Problem Areas, Comparison Group, and Motivational Interviewing Purity

This review includes studies across all behavior domains for which the efficacy of MI has been investigated, and we report effect sizes by target behaviors. We further differentiated trials comparing MI to untreated control groups from those in which

MI was added to or compared with other types of active treatment. A previous meta-analysis reported slightly larger effects of MI when added to other treatment than when tested as a stand-alone intervention (Burke et al. 2003). Finally, we did our best to differentiate studies of “pure” MI from those in which MI was combined with another established treatment. We computed composite effect sizes to address each of these issues, using the combined effect size from each relevant study to determine the relative efficacy of MI across problem areas, design types, and in studies with more “pure” forms of MI versus those in which MI was combined with another treatment. In all, we estimated more than 884 effect sizes in preparing this review.

Analysis of Motivational Interviewing Efficacy Across Time

Most studies of MI have reported outcome data across several follow-up points. To provide cross-study consistency, we classified follow-ups as having occurred at posttreatment and at the following posttreatment intervals: 1–3 months, 4–6 months, 7–12 months, 13–24 months, and longer than 2 years. Combined between-group effect sizes were calculated for all data during each of the follow-up intervals. In addition, combined within-group effect sizes for MI were calculated for each time interval, comparing each follow-up variable value with its baseline level.

Homogeneity Analyses

To determine the appropriateness of later statistical procedures, such as t-tests and multiple regression analyses, homogeneity analyses were conducted on groups of effect sizes that were entered into these analyses. T-tests and multiple regression analyses assume homoscedasticity, or that nonsystematic variance is equal across observations, and little is known about the violation of this assumption on these conventional statistical methods (Hedges & Olkin 1985). A Q statistic was calculated and tested for significance for each group that would be entered into a later analysis. A significant Q statistic indicates that the group is statistically heterogeneous.

RESULTS

Characteristics of Included Trials

STUDY DESIGN For full details of the characteristics of each trial, see the Supplemental Material link for Supplemental Table 1 in the online version of this chapter or at <http://www.annualreviews.org/>. Seventy-two studies met inclusion criteria for this meta-analysis. The studies tested the efficacy of motivational interviewing within the following behavioral domains: alcohol (31), smoking (6), HIV/AIDS (5), drug abuse (14), treatment compliance (5), gambling (1), intimate relationships (1), water purification/safety (4), eating disorders (1), and diet and exercise (4).

TABLE 1 Combined effect sizes (d_c , 95% confidence intervals) by target problem and comparison group*

	Combined d_c across all follow-up points			Combined d_c at follow-ups \leq three months				
	All studies	Untreated	Additive	Treatment	All studies	Untreated	Additive	Treatment
Alcohol	0.26 (N = 31) (0.18, 0.33)	0.38 (N = 14) (0.20, 0.56)	0.33 (N = 5) (0.23, 0.44)	0.11 (N = 13) (0.05, 0.17)	0.41 (N = 18) (0.31, 0.51)	0.44 (N = 9) (0.30, 0.59)	0.28 (N = 3) (0.03, 0.54)	0.38 (N = 6) (0.23, 0.53)
Smoking	0.14 (N = 6) (0.09, 0.20)	0.13 (N = 2) (0.04, 0.22)	0.17 (N = 5) (0.08, 0.25)	0.04 (N = 2) (−0.08, 0.16)	0.01 (N = 1) (−0.27, 0.30)	0.05 (N = 1) (−0.09, 0.18)	0.05 (N = 1) (−0.27, 0.30)	
HIV	0.53 (N = 5) (0.24, 0.81)	0.12 (N = 3) (−0.04, 0.28)	0.94 (N = 2) (0.41, 1.46)	0.71 (N = 4) (0.24, 1.19)	0.12 (N = 3) (−0.04, 0.28)	0.12 (N = 3) (−0.04, 0.28)	0.12 (N = 3) (2.4, 4.5)	
Drugs	0.29 (N = 13) (0.15, 0.43)	0.45 (N = 6) (0.16, 0.74)	0.53 (N = 2) (−0.05, 1.12)	0.12 (N = 6) (−0.05, 0.20)	0.51 (N = 9) (0.13, 0.90)	0.69 (N = 5) (0.05, 1.32)	0.53 (N = 2) (−0.05, 1.12)	0.02 (N = 2) (−0.08, 0.13)
Treatment compliance	0.72 (N = 5) (0.56, 0.89)	0.10 (N = 2) (−0.15, 0.36)	0.80 (N = 3) (0.64, 0.97)	0.42 (N = 4) (0.21, 0.63)	0.16 (N = 2) (0.16, 0.48)	0.75 (N = 2) (0.41, 1.09)	0.75 (N = 2) (0.41, 1.09)	0.43 (N = 1) (0.21, 0.65)
Gambling	0.29 (N = 1) (0.16, 0.42)	0.46 (N = 1) (0.17, 0.74)	0.24 (N = 1) (0.09, 0.40)	0.44 (N = 1) (0.27, 0.61)	0.46 (N = 1) (0.17, 0.74)	0.46 (N = 1) (0.17, 0.74)	0.46 (N = 1) (0.17, 0.74)	0.43 (N = 1) (0.21, 0.65)
Water purification/safety	0.30 (N = 4) (0.05, 0.55)	0.30 (N = 4) (0.05, 0.55)	0.51 (N = 2) (0.30, 0.72)	0.51 (N = 2) (0.30, 0.72)	0.51 (N = 2) (0.30, 0.72)	0.51 (N = 2) (0.30, 0.72)	0.51 (N = 2) (0.30, 0.72)	0.51 (N = 2) (0.30, 0.72)
Eating disorder	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)	−0.07 (N = 1) (−0.42, 0.26)
Diet and exercise	0.78 (N = 4) (0.41, 1.16)	0.78 (N = 4) (0.41, 1.16)	0.14 (N = 1) (−0.16, 0.44)	0.14 (N = 1) (−0.16, 0.44)	0.14 (N = 1) (−0.16, 0.44)	0.14 (N = 1) (−0.16, 0.44)	0.14 (N = 1) (−0.16, 0.44)	0.14 (N = 1) (−0.16, 0.44)

* Note: $p < 0.05$; N represents the number of studies from which variables were taken (some studies had outcome variables in two comparison categories).

In the analyzed studies, MI was seldom given alone, but was typically combined with feedback and often some other form of treatment. In 41 studies, treatment groups received MI or MI plus feedback only, whereas in 31 studies, MI was combined with some other type of intervention, including education, self-help manuals, relapse prevention, cognitive therapy, skills training, Alcoholics Anonymous, stress management, and treatment as usual for the particular setting. Comparison groups also differed widely across studies. In 21 studies, MI was compared to a no-treatment or placebo condition. Five studies investigated the additive effects of MI to standard treatment, whereas six studies directly contrasted MI with an unspecified standard treatment. Seven studies investigated the effects of MI when added to another established treatment, twenty-five studies contrasted MI with another established treatment, six studies had mixed designs, and two studies solely investigated within-group change.

As discussed above, all studies were coded for 12 dimensions of methodological quality, yielding methodological quality scores that ranged from 4 to 16 (mean = 10.76, SD = 2.43), slightly higher than the mean score (10.68) reported for 361 alcoholism clinical trials in general (Miller & Wilbourne 2003). In comparison to these 361 trials, studies of MI were more likely to report some form of intervention quality control (78% versus 57%) and to be multisite trials (28% versus 5%), but were less likely to follow clients for 12 months or longer (18% versus 51%) or to complete follow-up with 70% or more of enrolled participants (45% versus 75%). The duration of follow-up ranged from 0 to 60 months posttreatment (mean = 8.8, SD = 10.28).

All outcome variables for which effect sizes could be calculated were enumerated for each study. The number of reported outcome variables ranged from 1 to 12 (mean = 3.3, SD = 2.3). To avoid capitalization on chance by the number of statistical tests conducted, we combined effect sizes across all reported outcome variables in each study.

CHARACTERISTICS OF MOTIVATIONAL INTERVIEWING For full details of the characteristics of MI for each trial see the Supplemental Material link for Supplemental Table 2 in the online version of this chapter or at <http://www.annualreviews.org/>. Characteristics of MI were also coded for all studies. As a rough index of the degree to which each study had implemented MI, we coded whether interventions were specified as including the following components of MI: being collaborative, being client centered, being nonjudgmental, building trust, reducing resistance, increasing readiness to change, increasing self-efficacy, increasing perceived discrepancy, engaging in reflective listening, eliciting change talk, exploring ambivalence, and listening empathically. The total number of these strategies reported to have been implemented in interventions identified as MI ranged from 0 to 12 (mean = 3.6, SD = 2.8).

The duration of MI interventions also varied. In 68 studies that reported these data, MI duration ranged from 15 minutes to 12 hours, with an average dose of about two sessions (mean = 2.24 hours, SD = 2.15). When MI was combined with

other treatment components, “duration” included only the time committed to MI. Comparison group treatment durations ranged from 0 to 28 hours (mean = 2.89, SD = 5.57). The difference in treatment duration between MI and comparison groups ranged from -25 hours (the comparison treatment was 25 hours longer than MI) to +6 hours [MI was 6 hours longer than the no-treatment control (mean = -0.48, SD = 4.9)].

Of the 72 studies included in the analyses, most (74%) reported that the MI intervention had been standardized by a manual or a specific training. For 13 studies that reported amount of training time, a mean of 9.92 (SD = 7.35) hours was spent in training. Only 26 studies (29%) provided any kind of posttraining support (such as supervision) for therapists, and only 21 studies (36%) included any form of competency or fidelity assessment after initial training.

MI was delivered in a variety of settings, including aftercare/outpatient clinics (15), inpatient facilities (11), educational settings (6), community organizations (6), general practitioner offices (5), prenatal clinics (3), emergency rooms (2), employee assistance programs (2), halfway houses (2), over the telephone (3), in patients’ homes (1), in jail (1), in mixed settings (7), or in unspecified treatment settings (8). The agents implementing the MI, when specified, included paraprofessionals or students (8), master’s level counselors (6), psychologists (6), nurses (3), physicians (2), dieticians (1), and modally a mix of varying levels of professionals (22).

CHARACTERISTICS OF STUDY SAMPLES For full details of the characteristics of each trial sample see the Supplemental Material link for Supplemental Table 3 in the online version of this chapter or at <http://www.annualreviews.org/>. The 72 studies enrolled between 21 and 952 participants (mean = 198.16, SD = 204.39), for a total of 14,267 clients. On average, the samples included 54.77% males (range: 0%–100%), and ranged in age from 16 to 62 (mean = 34.11, SD = 8.96). Only 37 studies specified ethnic composition, of which 16 samples (43%) were comprised primarily of participants from U.S. minority groups, including 10 with predominantly or entirely African American samples. Problem severity varied widely, and eight samples specifically recruited participants with concomitant substance use and mental disorders.

TREATMENT EFFECTS OF MOTIVATIONAL INTERVIEWING

General Observations

Before examining MI effects by target problem areas, we offer some broad observations from our analysis of 72 outcome studies. The effect sizes for each variable at every follow-up point is available at the Supplemental Material link for Supplemental Table 4 in the online version of this chapter or at <http://www.annualreviews.org/>.

First of these observations is the wide variability in effect sizes across studies, even within problem areas. In studies of alcohol abuse, for example, although most trials have reported statistically significant effects of MI, the observed effect sizes have varied from $d_c = 0$ to more than 3.0 (where $d_c = 1.0$ represents a between-group difference of one standard deviation). This means that in using ostensibly the same treatment method (MI) with the same target problem, very different effects are obtained across sites and populations. In Project MATCH, a nine-site study of treatments for alcohol use disorders, the relative efficacy of an MI-based intervention varied significantly across sites and therapists despite extensive efforts to standardize training and treatment procedures (Project MATCH Research Group 1998). Thus, it appears that variation in the delivery of MI can have substantial impact on its outcome.

A second broad observation is that an effect of MI tends to be seen early and to diminish across a year of follow-up. To examine this, we combined effects for all variables from all studies within specific follow-up period ranges. As displayed in Figure 1, relative effect sizes for MI decrease across time. Across all studies, d_c was 0.77 (95% confidence interval: 0.35, 1.19) at 0 to 1 month posttreatment, 0.39 (0.27, 0.50) at >1 to 3 months, 0.31 (0.23, 0.38) at >3 to 6 months, 0.30 (0.16, 0.43) at >6 to 12 months, and 0.11 (0.06, 0.17) at follow-ups longer than 12 months. An interesting exception to this trend, seen in Figure 1, is found in studies where the additive effect of MI is tested. In these studies, clients are typically randomized to receive or not to receive MI at the beginning of a standard or specified treatment

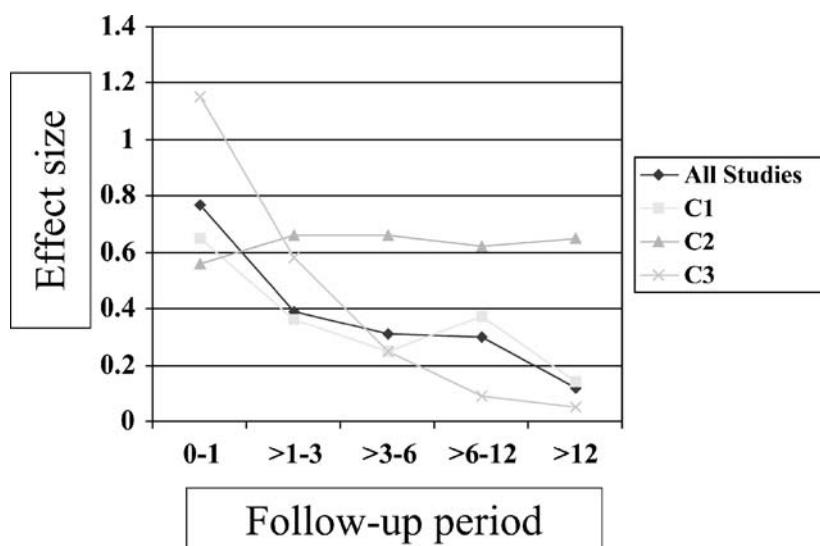


Figure 1 Combined effect sizes of motivational interviewing across follow-up intervals.

program. In this case, the effect of MI in improving outcome is maintained or increased over time, hovering around $d_c = 0.60$.

Outcome variability, however, makes it difficult to specify a meaningful average effect size for MI without regard to problem domain, population, interventionists, or follow-up duration. A full table of combined between-group effect sizes for each included study can be viewed online. See the Supplemental Material link in the online version of this chapter or at <http://www.annualreviews.org/>. The combined effect sizes (pooling across outcome variables and follow-up points) for individual studies ranged from -0.19 to 3.25 (mean = 0.43 , SD = 0.62). Using d_c for all reported outcome variables across all follow-up points, 38 of the studies (53%) showed a significant effect favoring MI ($p < 0.05$).

Correlates of Effect Size

STUDY CHARACTERISTICS We also examined relationships between observed combined effect size (d_c) and a number of study attributes as potential moderators of outcome. In regression as well as correlational analyses, we found no significant relationship between d_c and study characteristics including methodological quality, number of outcome variables, longest follow-up point, MI purity, type of comparison group, or problem area.

MI CHARACTERISTICS In multiple regression analyses, we found that d_c was not significantly predicted by our measures of MI duration, purity, counselor training, or posttraining support. Of MI delivery characteristics, only the presence of a manual was significantly related to outcome, predicting 8.5% of the variance in d_c ($\beta = -0.292$, $p < 0.05$). The direction of this difference was such that studies not reporting use of a manual had a mean $d_c = 0.65$ (SD = 0.62), whereas those standardizing treatment with a manual reported a mean $d_c = 0.37$ (SD = 0.62). A follow-up independent sample t-test reflected this difference as a trend ($t = 1.53$, $p = 0.28$). It should be noted that no studies provided data allowing for within-study comparison of manual-guided versus nonmanual-guided MI. Because the evidence that manual-guided treatments are associated with smaller effect size comes solely from between-study comparisons, it is possible that other important differences between studies exist.

SAMPLE CHARACTERISTICS Similarly, we regressed d_c onto study sample characteristics including mean age, gender composition, ethnic composition, and problem severity. Only ethnic composition significantly predicted d_c , accounting for 19% of variance ($\beta = 0.434$, $p < 0.05$). A follow-up test ($t = -0.39$, $p < 0.05$) revealed that effects of MI were significantly larger for minority samples ($M d_c = 0.79$) than for non-minority white samples ($M d_c = 0.26$).

OUTCOME MEASURES Within behavioral domains, studies utilized a wide variety of treatment outcome measures. Although most behavioral domains had too

few studies and too many different outcome variables to form meaningful groups, alcohol outcome variables could be divided into quantity, frequency, intoxication (blood alcohol concentration, or BAC) level, and alcohol-related problems categories. Combined effect sizes were determined for each of these variables across studies and follow-up points. A $d_c = 0.30$ (0.09, 0.52; $p < 0.05$) was found for quantity variables, $d_c = 0.31$ (0.18, 0.44; $p < 0.05$) for frequency variables, $d_c = 0.22$ (0.10, 0.34; $p < 0.05$) for BAC variables, and $d_c = 0.08$ (-0.02, 0.19; $p > 0.05$) for alcohol-related problems. For smoking studies, a $d_c = 0.15$ (-0.06, 0.23; $p < 0.05$) was found for abstinence outcome variables, and $d_c = 0.11$ (0.00, 0.21; $p > 0.05$) for quit attempt variables. Variables from HIV studies could be divided into knowledge with $d_c = 1.46$ (-0.54, 3.45; $p > 0.05$), behavioral intentions with $d_c = 0.88$ (0.05, 1.72; $p < 0.05$), and sexual risk behaviors with $d_c = 0.07$ (-0.05, 0.19; $p > 0.05$).

Effects of Motivational Interviewing by Problem Domain

Table 1 provides a concise summary of effect sizes, combined across outcome variables, for studies of MI in various problem domains. In contrast to the above-reported analyses (Figure 1), which showed substantial reduction in d_c over time, Table 1 provides separate d_c means in the short-term (up to three-month follow-up), and then combined across all follow-up points. Combined effect sizes are further subdivided based on the nature of the comparison group: (a) MI versus no treatment or placebo, (b) MI versus no MI added to standard or specified treatment, or (c) MI contrasted with a standard or specified treatment. For studies with mixed comparisons, individual variables were selected based on comparison type, and were categorized appropriately.

ADDICTIVE BEHAVIORS In terms of volume of studies, the strongest support by far for MI efficacy is in the area for which it was originally designed: altering substance use (Miller 1983). A total of 32 trials have focused on alcohol abuse, yielding d_c values ranging from -0.08 to 3.07, with a mean of 0.41 posttreatment, and 0.26 across all follow-up points. The largest effects (all >0.7) were reported in studies comparing MI with no treatment (Gentilello et al. 1999), a wait-list control (Kelly et al. 2000) or education (Graeber et al. 2003), or adding MI to standard treatment (Aubrey 1998, Brown & Miller 1993). An additional 13 trials tested the between-group effect of MI in addressing illicit drug use, again with a large range of effects (0 to 1.81). Here effect sizes on average were larger at early than at later follow-ups (0.51 versus 0.29). Curiously, MI appears to have been largely unsuccessful to date in promoting smoking cessation. Six MI trials yielded only one small effect collapsing across outcome variables (Butler et al. 1999). We are aware, however, of several unpublished positive trials that may soon alter this picture with regard to smoking. One study reported significant effects of MI in treating pathological gambling (Hodgins et al. 2001).

HEALTH BEHAVIORS MI has also been tested with other health behaviors in the context of health promotion (Miller 2004). Large but inconsistent effects (d_c from -0.19 to 3.25) have been reported in five trials of MI for HIV risk reduction. Thevos and colleagues have reported large effects of MI to encourage the adoption of water purification/safety technology in rural African villages (Thevos et al. 2000, 2002/2003). Encouraging effects have also been reported for MI in promoting adherence to diet and exercise programs. A single study found no difference between MI and brief behavior therapy in treating bulimia.

TREATMENT ADHERENCE Finally, several studies have reported large effects of MI in promoting treatment engagement, retention, and adherence. As noted above, the effects of MI appear to persist or increase over time when added to an active treatment.

DISCUSSION

Across a growing array of problem areas, MI generally shows small to medium effects in improving health outcomes. As a stand-alone brief intervention, MI has been particularly well tested and found promising in addressing addictive behaviors, with the notable exception (to date) of smoking cessation. Further research is needed to determine the reliability of and possible explanations for the discrepant findings observed for smoking behaviors. Applications to health behavior, particularly in the management of chronic illnesses, have been expanding rapidly, and initial trials suggest similar benefit to that observed with addictive behaviors.

It is clear, however, that MI as practiced in trials to date does not consistently improve outcome. Even among studies focused on the same problem domain, high variability exists in effects across studies and therapists.

An obvious research direction, therefore, is to identify factors that influence the effectiveness of MI, including specific factors that mediate and moderate its effects. With a reasonable base of clinical trials supporting specific efficacy, research has recently turned to a search for “active ingredients” and aspects of MI delivery that influence outcomes. This search has been impeded, however, because few studies have detailed how interventionists were trained, provided documentation of the fidelity of delivery of MI, or included process measures to relate to outcomes (Burke et al. 2002). In some cases (e.g., Kuchipudi et al. 1990), the brief descriptions of treatment delivered as MI appear to be inconsistent with the spirit and principles described by its progenitors (Rollnick & Miller 1995). Progress toward a theory of MI efficacy is briefly discussed in the final section of this chapter.

Treatment Adherence

Several trends emerged from our meta-analysis. One is that relatively high effect sizes are often observed when MI is added at the outset of a treatment program,

including unspecified “treatment as usual” (Aubrey 1998, Brown & Miller 1993, Daley et al. 1998). This is somewhat counterintuitive, in that larger effect sizes might be expected when MI is compared with no treatment, rather than having to exert an additive effect above active treatment. Significant improvement in treatment outcome when MI is added appears to be attributable to its effects on treatment retention and adherence. In a randomized trial, Brown & Miller (1993) found that therapists in an inpatient substance abuse treatment program who were unaware of which patients had received MI, reliably rated the MI group as more motivated and adherent and as having better prognosis. These therapist ratings, in turn, mediated the effect of MI in doubling posttreatment abstinence rates. Large effects are also reported when treatment retention and adherence are the specific targets of MI. Aubrey (1998) reported a doubling of outpatient substance abuse treatment sessions attended by adolescents given a single session of MI at intake, as well as a doubling of three-month abstinence rates.

Immediacy of Effect

Controlled trials also commonly report a rapid impact of MI, with a gradual decrease of effect size across time. This is, of course, a common finding for discrete interventions. During eight weeks of drug administration, for example, a medication may yield significant benefits that subsequently fade after dosing is discontinued. In part, this decrease in between-group effects is attributable to a “catching up” of the control/comparison groups with which MI is compared. If MI is offered as a stand-alone intervention, long-term effects may be enhanced by booster sessions or stepped care. When MI is used as a prelude to treatment, however, its effects appear to endure across time, suggesting a synergistic effect of MI with other treatment procedures.

Are Manuals a Good Idea?

An unexpected finding of our meta-analysis was the relationship between effect size and the use of manuals to guide MI delivery. Our finding that manual-guided MI was associated with smaller effect sizes bears replication and further exploration.

We have had, however, one salient experience related to manual-guided MI. Following a series of findings that an early MI session improves treatment outcomes, we conducted a large randomized trial in two public substance abuse treatment programs (Miller et al. 2003). Clients were randomly assigned to receive or not to receive a single session of MI shortly after treatment intake. The MI was manual guided and participants were followed for one year. Contrary to prior trials, we found no significant benefit of MI.

Subsequent psycholinguistic analyses of these MI sessions revealed an informative pattern (Amrhein et al. 2003). Clients who subsequently abstained from drug use during follow-up had shown a characteristic pattern of increasing motivation for and commitment to abstinence over the course of the MI session. Nonresponders,

in contrast, showed a similar increase in motivation and commitment, which suddenly reversed in the final minutes of the session and crashed back to zero. What happened? The treatment manual, designed to complete MI in one session, instructed therapists to end the session by constructing a concrete behavior change plan regardless of whether the client seemed ready to do so. This would have the predictable (but unanticipated) effect, during the closing minutes of the session, of eliciting resistance from clients who were less ready for change, which in turn would be expected to undermine behavior change. The problem, it seems, is that the therapists did exactly what the manual instructed them to do, pressing forward to complete the change plan even if the client resisted, which is itself a violation of good MI practice.

Matching Indications

Another unexpected result of our meta-analysis was the finding of larger effects of MI with U.S. samples comprised primarily or exclusively of people from ethnic minority groups. We have no theoretical explanation for this finding, but it does converge with a recently completed reanalysis of data from a multisite alcoholism treatment trial (Villanueva et al. 2003). Analyzing treatment data for only Native American participants in Project MATCH, we found significantly better outcome for those assigned to 4-session MI (motivational enhancement therapy) than for those assigned to 12-session cognitive-behavior therapy or 12-step facilitation therapy. Our informal experience in MI training with Native American populations suggests that the client-centered, supportive, and nonconfrontational style of MI may resemble the normative communication style of Indian populations, at least in the American Southwest, thereby representing a culturally congruent intervention. Similar analyses, however, failed to find an advantage for MI in African American (Tonigan et al. 2003) or Hispanic American (Arroyo et al. 2003) clients.

MI also appears to be differentially effective with clients who are more angry and resistant, or less ready for change (Heather et al. 1996, Project MATCH Research Group 1997). This is consistent with the original intent and theoretical rationale for MI. Conversely, MI may be contraindicated for clients who are already clearly committed to change and ready for action.

TOWARD A THEORY OF MOTIVATIONAL INTERVIEWING

The high variability of effect sizes combined with the frequency of observed significant effects indicates that MI is an active treatment, but that the mechanisms of action are not well understood. Our crude measure of MI purity (the number of MI-particular components mentioned in an article) failed to predict effect size. Although there are clear therapist differences in effectiveness in delivering MI, we have been unsuccessful in predicting MI proficiency from personal characteristics

of counselors (Project MATCH Research Group 1998). This suggests that it may be fruitful to examine therapeutic processes occurring within MI sessions, as possible correlates of treatment outcome.

In its origins (Miller 1983), MI was not derived from theory, but rather it arose from specification of principles underlying intuitive clinical practice. The client-centered phenomenological perspective of Carl Rogers (1959), which was clearly influential as a guiding spirit of MI, emphasized empathic understanding and radical acceptance as triggers for change. Early conceptual ties were also made to cognitive dissonance (Festinger 1957) and self-perception theory (Bem 1972), based on the reasoning that when people verbally justify behavior change they are more likely to follow through with it (Miller & Rollnick 1991).

MI places strong emphasis on eliciting the client's own perceptions, values, and motivations for change. In Socratic fashion, it should be the client rather than the counselor who makes the arguments for change. The reasoning behind this is that people in need of change, including those who present for formal treatment, are normally also ambivalent about change. A counselor who advocates for change is likely to elicit from the client the opposite (resistance) side of the client's own ambivalence. That might be harmless enough, except for the robust finding that people tend to become more committed to positions that they defend verbally (Bem 1967). Thus, people can literally talk themselves out of (or into) behavior change.

Therefore, counselors should act in a manner that calls forth the prochange side of client ambivalence, the side that elicits the client's own motivations for change. Conversely, counselors should assiduously avoid the position in which they argue for change while the client argues against it. MI is, in essence, both a counseling style and a set of clinical strategies and skills for evoking change talk from clients, and for defusing resistance when it arises (Miller & Rollnick 2002).

Over the two decades since MI was introduced, data have shaped an emergent theory of the inner workings of this approach. In simplest form, the theory is expressed in three hypotheses:

1. Counselors who practice MI will elicit increased levels of change talk and decreased levels of resistance from clients, relative to more overtly directive or confrontational counseling styles.
2. The extent to which clients verbalize arguments against change (resistance) during MI will be inversely related to the degree of subsequent behavior change.
3. The extent to which clients verbalize change talk (arguments for change) during MI will be directly related to the degree of subsequent behavior change.

We have found strong support for the first two of these hypotheses. MI does roughly double the rate of change talk and halve the rate of resistance, relative to action-focused counseling or confrontation (Miller et al. 1993). The counseling skill of accurate empathy (Truax & Carkhuff 1967) has been particularly linked

to improved outcomes in treating alcohol problems (Miller & Baca 1983, Miller et al. 1980, Valle 1981). We also have found that frequency of client resistance predicted continued drinking after treatment (Miller et al. 1993). Thus, client responses appear to be highly influenced by counselor style, and in turn predict treatment outcome.

We consistently failed to find support, however, for the third hypothesis—that increased client change talk would predict behavior change. Frequency of change talk statements, which we usually measured during the first 20 minutes of an MI session, was unrelated to subsequent behavioral outcomes. This obviously posed a serious problem for the fledgling theory of MI.

Collaboration with psycholinguist Paul Amrhein led to a different approach to analyzing client speech. Amrhein suggested that we had been combining too many speech events in our single concept of change talk, and recommended disaggregating it into natural language components: desire, ability, reasons, need, and commitment. He analyzed more than 100 entire MI sessions, meticulously coding each client utterance for these speech events. In addition to counting them (frequency), he also rated the strength of motivation reflected in the client's speech. To say, "I'll think about it," or "I'll try," for example, reflects a much lower level of commitment than "I promise" or "I will."

The results were striking (Amrhein et al. 2003). Only one of the subtypes of change talk—commitment—predicted behavior change. Furthermore, it was not the frequency but rather the strength of commitment language, and more particularly the pattern of commitment across the session, that robustly predicted behavioral outcomes, in this case, drug abstinence. Desire, ability, reasons, and need did not predict change, but all four did predict the emergence of commitment, which in turn was prognostic of change. His psycholinguistic findings gave substance to the early intuitive distinction between two phases of MI (Miller & Rollnick 1991). In phase 1 of MI, the goal is to enhance motivation for change by eliciting the client's statements of desire, ability, reasons, and need for change. Then in phase 2, the focus shifts to strengthening commitment to change. Amrhein's findings also converge with the commonsense precept that people tend to find their own verbalizations persuasive for guiding their behavior (Bem 1967, Hosford et al. 1995), and with more recent finding that stated implementation intentions predict behavioral follow-through, particularly when accompanied by a specific plan for carrying out the change (Gollwitzer 1999). These psycholinguistic data provided a missing piece in the emergent theory of MI, supporting the link between client in-session speech and posttreatment outcomes. We had been measuring the wrong statistic (intercept rather than slope) for the wrong metric (frequency instead of intensity) of the wrong dependent variable (generic change talk rather than commitment), and in the wrong portion of MI sessions (beginning rather than ending). The client's starting level of motivation in an MI session was unrelated to outcome; it was commitment strength during the final minutes of the session that most strongly predicted behavior change (Amrhein et al. 2003).

LEARNING MOTIVATIONAL INTERVIEWING

Finally, research has addressed the question of optimal methods for helping clinicians to learn the intervention style of MI. Trainers are often asked to teach MI in periods varying from one hour to one day, and counselors sometimes attend such training in the hope of learning a few tricks to make clients do what they want them to do. MI is nothing of the sort. Rather, it is a complex clinical style for eliciting the client's own values and motivations for change. It is far more about listening than telling, about evoking rather than instilling. MI communicates not, "I have what you need," but instead, "You have what you need, and together we will find it."

The most familiar vehicle for continuing professional education is the expert workshop, which in MI is often offered over the course of two full days. How effective are such workshops in increasing clinician proficiency in MI? This was the question addressed in an evaluation of a two-day workshop offered by Miller, with outcomes assessed not only by clinician self-report but also by practice samples obtained before and after training (Miller & Mount 2001). Participants submitted tape recordings of their counseling with actual clients prior to and several months after the workshop and interacted with a standard-patient actor to demonstrate their posttraining skill acquisition. After training, the clinicians showed modest albeit statistically significant increases in MI-congruent practice behavior, but not enough to make any difference in how their clients responded. Clients showed no change in levels of resistance or change talk after the clinicians were trained. On self-report, however, workshop participants reported confidence that they were now reasonably proficient in MI and were implementing it in practice. Such glowing self-reports of benefit from training are common (Rubel et al. 2000), but proved to be uncorrelated with actual increases in proficiency (Miller & Mount 2001).

In a subsequent trial of training methods, clinicians who wanted to learn MI were randomly assigned to receive or not to receive, in addition to the two-day workshop, one or both of two aids for learning: specific proficiency feedback from practice tapes, and six expert coaching consultations by telephone (Miller et al. 2005). A wait-list control group was given the MI book and training videotapes (Miller et al. 1998) and asked to improve their MI skills on their own, prior to attending the workshop. Based on Amrhein's findings reported above, we also changed our training to a learning-to-learn format. We instructed trainees that they would not be skillful in MI by the end of the workshop, but that if we were successful they would know how to learn MI from their clients. Specific emphasis was placed on recognizing client speech events (change talk, commitment, resistance) that are relevant to behavioral outcomes, and using these as differential cues to shape successful practice.

As before, those receiving only the workshop showed modest gains in MI skills, and did not reach proficiency thresholds required for therapists in a clinical trial. Clinicians working on their own from MI tapes and book showed little improvement in skillfulness. Either or both of the training aids, however, significantly

improved post-workshop MI proficiency, and participants in these groups on average reached levels required for clinical trial certification.

SUMMARY

The evidence base for motivational interviewing is strong in the areas of addictive and health behaviors. Useful as a brief intervention in itself, MI also appears to improve outcomes when added to other treatment approaches. New research is clarifying the causal processes underlying the efficacy of motivational interviewing, and exploring optimal methods for helping practitioners to develop proficiency in this clinical method.

**The Annual Review of Clinical Psychology is online at
<http://clinspsy.annualreviews.org>**

LITERATURE CITED

- Amrhein PC, Miller WR, Yahne CE, Palmer M, Fulcher L. 2003. Client commitment language during motivational interviewing predicts drug use outcomes. *J. Consult. Clin. Psychol.* 71:862–78
- Arroyo JA, Miller WR, Tonigan JS. 2003. The influence of Hispanic ethnicity on long-term outcome in three alcohol treatment modalities. *J. Stud. Alcohol* 64:98–104
- Aubrey LL. 1998. *Motivational interviewing with adolescents presenting for outpatient substance abuse treatment*. Unpubl. doctoral dissert., Univ. New Mexico, Albuquerque
- Bem DJ. 1967. Self-perception: an alternative interpretation of cognitive dissonance phenomena. *Psychol. Rev.* 74:183–200
- Bem DJ. 1972. Self-perception theory. In *Advances in Experimental Social Psychology*, ed. L Berkowitz, 6:1–62. New York: Academic
- Bien TH, Miller WR, Tonigan JS. 1993. Brief interventions for alcohol problems: a review. *Addiction* 88:315–36
- Brown JM, Miller WR. 1993. Impact of motivational interviewing on participation and outcome in residential alcoholism treatment. *Psychol. Addict. Behav.* 7:211–18
- Burke BL, Arkowitz H, Dunn C. 2002. The efficacy of motivational interviewing on participation and outcome in residential alcoholism treatment. In *Motivational Interviewing: Preparing People for Change*, ed. WR Miller, S Rollnick, 2:217–50. New York: Guilford. 2nd ed.
- Burke BL, Arkowitz H, Menchola M. 2003. The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *J. Consult. Clin. Psychol.* 71:843–61
- Butler CC, Rollnick S, Cohen D, Bachmann M, Russell I, et al. 1999. Motivational consulting versus brief advice for smokers in general practice: a randomized trial. *Br. J. Gen. Pract.* 49:611–16
- Daley DC, Salloum IM, Suckoff A, Kirisci L, Thase ME. 1998. Increasing treatment adherence among outpatients with depression and cocaine dependence: results of a pilot study. *Am. J. Psychiatry* 155:1611–13
- Dunn C, Derroo L, Rivara FP. 2001. The use of brief interventions adapted from motivational interviewing across behavioral domains: a systematic review. *Addiction* 96: 1725–42
- Festinger L. 1957. *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford Univ. Press
- Gentilello LM, Rivara FP, Donovan DM,

- Jurkovich GJ, Duranciang E, et al. 1999. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Ann. Surg.* 230:473–83
- Gollwitzer PM. 1999. Implementation intentions: simple effects of simple plans. *Am. Psychol.* 54:493–503
- Graeber DA, Moyers TB, Griffith G, Guajardo E, Tonigan JS. 2003. A pilot study comparing motivational interviewing and an educational intervention in patients with schizophrenia and alcohol use disorders. *Community Ment. Health J.* 39:189–202
- Heather N, Rollnick S, Bell A, Richmond R. 1996. Effects of brief counseling among heavy drinkers identified on general hospital wards. *Drug Alcohol Rev.* 15:29–38
- Hedges LV, Olkin I. 1985. *Statistical Methods for Meta-Analysis*. San Diego, CA: Academic
- Hodgins DC, Currie SR, el-Guebaly N. 2001. Motivational enhancement and self-help treatments for problem gambling. *J. Consult. Clin. Psychol.* 69:50–57
- Hosford RE, Moss CS, Morrell G. 1995. The self-as-model technique: helping prison inmates change. In *Counseling Methods*, ed. JD Krumboltz, CE Thoresen, pp. 487–95. New York: Holt, Rinehart & Winston
- Kelly AB, Halford WK, Young RM. 2000. Maritally distressed women with alcohol problems: the impact of a short-term alcohol-focused intervention on drinking behaviour and marital satisfaction. *Addiction* 95:1537–49
- Kuchipudi V, Hoben K, Flickinger A. 1990. Failure of a 2-hour motivational interview to alter recurrent drinking behavior in alcoholics with gastrointestinal disease. *J. Stud. Alcohol* 51:356–60
- Miller WR. 1983. Motivational interviewing with problem drinkers. *Behav. Psychother.* 11:147–72
- Miller WR. 1994. Motivational interviewing: III. On the ethics of motivational intervention. *Behav. Cogn. Psychother.* 22:111–23
- Miller WR. 2004. Motivational interviewing in the service of health promotion. *Am. J. Health Promot.* 18:1–10
- Miller WR, Baca LM. 1983. Two-year follow-up of bibliotherapy and therapist-directed controlled drinking training for problem drinkers. *Behav. Ther.* 14:441–48
- Miller WR, Benefield RG, Tonigan JS. 1993. Enhancing motivation for change in problem drinking: a controlled comparison of two therapist styles. *J. Consult. Clin. Psychol.* 61:455–61
- Miller WR, Mount KA. 2001. A small study of training in motivational interviewing: Does one workshop change clinician and client behavior? *Behav. Cogn. Psychother.* 29:457–71
- Miller WR, Rollnick S. 1991. *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York: Guilford
- Miller WR, Rollnick S. 2002. *Motivational Interviewing: Preparing People for Change*, Vol. 2. New York: Guilford
- Miller WR, Rollnick S, Moyers TB. 1998. *Motivational interviewing* (7-videotape ser.). Albuquerque: Univ. New Mexico
- Miller WR, Taylor CA, West JC. 1980. Focused versus broad-spectrum behavior therapy for problem drinkers. *J. Consult. Clin. Psychol.* 48:590–601
- Miller WR, Wilbourne PL. 2003. Mesa grande: a methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction* 97:265–77
- Miller WR, Yahne CE, Moyers TB, Martinez J, Pirritano M. 2005. A randomized trial of methods to help clinicians learn motivational interviewing. *J. Consult. Clin. Psychol.* In press
- Miller WR, Yahne CE, Tonigan JS. 2003. Motivational interviewing in drug abuse services: a randomized trial. *J. Consult. Clin. Psychol.* 71:754–63
- Miller WR, Zweben A, DiClemente CC, Rychtarik C. 1992. *Motivational Enhancement Therapy manual: a clinical research guide for therapists treating individuals with alcohol abuse and dependence*. Vol. 2, Proj. MATCH Monogr. Ser. Rockville, MD: Natl. Inst. Alcohol Abuse Alcohol.

- Prochaska JO, DiClemente CC. 1984. *The Transtheoretical Approach: Crossing Traditional Boundaries of Therapy*. Homewood, IL: Dow/Jones Irwin
- Proj. MATCH Res. Group. 1997. Project MATCH secondary a priori hypotheses. *Addiction* 92:1671–98
- Proj. MATCH Res. Group. 1998. Therapist effects in three treatments for alcohol problems. *Psychother. Res.* 8:455–74
- Rogers CR. 1959. A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In *Psychology: The Study of a Science*, ed. P Koch, 3:184–256. New York: McGraw-Hill
- Rollnick S, Miller WR. 1995. What is motivational interviewing? *Behav. Cogn. Psychother.* 23:325–34
- Rosenthal R. 1991. *Meta-Analytic Procedures for Social Research*. Newbury Park, CA: Sage
- Rubel EC, Sobell LC, Miller WR. 2000. Do continuing education workshops improve participants' skills? Effects of a motivational interviewing workshop on substance abuse counselors' skills and knowledge. *Behav. Ther.* 23:73–77
- Thevos AK, Olsen SJ, Rangel JM, Kaona FAD, Tembo M, et al. 2002/2003. Social market-
ing and motivational interviewing as community interventions for safe water behaviors: follow-up surveys in Zambia. *Int. Q. Community Health Educ.* 21:51–65
- Thevos AK, Quick RE, Yanjuli V. 2000. Motivational interviewing enhances the adoption of water disinfection practices in Zambia. *Health Promot. Int.* 15:207–14
- Tonigan JS, Miller WR, Daugherty M, Carroll RL. 2003. Project MATCH treatment participation and outcome by race: a retrospective analysis of African American treatment response. *Alcohol. Clin. Exp. Res.* 27(Suppl.):A159
- Truax CB. 1966. Reinforcement and non-reinforcement in Rogerian psychotherapy. *J. Abnorm. Psychol.* 71:1–9
- Truax CB, Carkhuff RR. 1967. *Toward Effective Counseling and Psychotherapy*. Chicago: Aldine
- Valle SK. 1981. Interpersonal functioning of alcoholism counselors and treatment outcome. *J. Stud. Alcohol* 42:783–90
- Villanueva M, Tonigan JS, Miller WR. 2003. A retrospective study of client-treatment matching: differential treatment response of Native American alcoholics in Project MATCH. *Alcohol. Clin. Exp. Res.* 26(Suppl.):A83

CONTENTS

A HISTORY OF CLINICAL PSYCHOLOGY AS A PROFESSION IN AMERICA (AND A GLIMPSE AT ITS FUTURE), <i>Ludy T. Benjamin, Jr.</i>	1
STRUCTURAL EQUATION MODELING: STRENGTHS, LIMITATIONS, AND MISCONCEPTIONS, <i>Andrew J. Tomarken and Niels G. Waller</i>	31
CLINICAL JUDGMENT AND DECISION MAKING, <i>Howard N. Garb</i>	67
MOTIVATIONAL INTERVIEWING, <i>Jennifer Hettema, Julie Steele, and William R. Miller</i>	91
STATE OF THE SCIENCE ON PSYCHOSOCIAL INTERVENTIONS FOR ETHNIC MINORITIES, <i>Jeanne Miranda, Guillermo Bernal, Anna Lau, Laura Kohn, Wei-Chin Hwang, and Teresa La Fromboise</i>	113
CULTURAL DIFFERENCES IN ACCESS TO CARE, <i>Lonnie R. Snowden and Ann-Marie Yamada</i>	143
COGNITIVE VULNERABILITY TO EMOTIONAL DISORDERS, <i>Andrew Mathews and Colin MacLeod</i>	167
PANIC DISORDER, PHOBIAS, AND GENERALIZED ANXIETY DISORDER, <i>Michelle G. Craske and Allison M. Waters</i>	197
DISSOCIATIVE DISORDERS, <i>John F. Kihlstrom</i>	227
THE PSYCHOBIOLOGY OF DEPRESSION AND RESILIENCE TO STRESS: IMPLICATIONS FOR PREVENTION AND TREATMENT, <i>Steven M. Southwick, Meena Vythilingam, and Dennis S. Charney</i>	255
STRESS AND DEPRESSION, <i>Constance Hammen</i>	293
THE COGNITIVE NEUROSCIENCE OF SCHIZOPHRENIA, <i>Deanna M. Barch</i>	321
CATEGORICAL AND DIMENSIONAL MODELS OF PERSONALITY DISORDER, <i>Timothy J. Trull and Christine A. Durrett</i>	355
THE DEVELOPMENT OF PSYCHOPATHY, <i>Donald R. Lynam and Lauren Gudonis</i>	381
CHILD MALTREATMENT, <i>Dante Cicchetti and Sheree L. Toth</i>	409
PSYCHOLOGICAL TREATMENT OF EATING DISORDERS, <i>G. Terence Wilson</i>	439
GENDER IDENTITY DISORDER IN CHILDREN AND ADOLESCENTS, <i>Kenneth J. Zucker</i>	467

THE DEVELOPMENT OF ALCOHOL USE DISORDERS, <i>Kenneth J. Sher, Emily R. Grekin, and Natalie A. Williams</i>	493
DECISION MAKING IN MEDICINE AND HEALTH CARE, <i>Robert M. Kaplan and Dominick L. Frosch</i>	525
PSYCHOLOGY, PSYCHOLOGISTS, AND PUBLIC POLICY, <i>Katherine M. McKnight, Lee Sechrest, and Patrick E. McKnight</i>	557
COGNITIVE APPROACHES TO SCHIZOPHRENIA: THEORY AND THERAPY, <i>Aaron T. Beck and Neil A. Rector</i>	577
STRESS AND HEALTH: PSYCHOLOGICAL, BEHAVIORAL, AND BIOLOGICAL DETERMINANTS, <i>Neil Schneiderman, Gail Ironson, and Scott D. Siegel</i>	607
POSITIVE PSYCHOLOGY IN CLINICAL PRACTICE, <i>Angela Lee Duckworth, Tracy A. Steen, and Martin E. P. Seligman</i>	629
INDEX Subject Index	653

Bijlage VI - Tabel Verandertaal

Taal die betrokkenheid aangeeft (commitment-taal)

Uitspraken over betrokkenheid impliceren een overeenstemming, bereidheid of verplichting met betrekking tot toekomstig gedrag. Deze betrokkenheid kan direct via een **werkwoord** tot uitdrukking gebracht worden.

5

1

meest sterke betrokkenheid-----minst sterke betrokkenheid

5	4	3	2	1
Ik garandeer	Ik ben van plan om	Ik kijk er naar uit om	Ik geef de voorkeur aan	Ik stel me voor
Ik zal	Ik ben klaar om	Ik ben het eens met	Ik geloof	Ik wed
Ik beloof	Ik stem toe om	Ik ga besluiten om	Ik denk	Ik hoop te
Ik ga	Ik ben bereid om	Ik geef toe dat	Ik stel voor	Ik wil het risico nemen
Ik geef mijn woord	Ik ben er aan toe om	Ik verwacht dat	Ik ben geneigd om	Ik wil het wel proberen
Ik wijd mij zelf aan		Ik ga een plan maken om	Ik voorspel	Ik denk dat ik zal
Ik weet			Ik neem aan	Ik veronderstel dat ik zal
				Ik verwacht dat ik zal
				Ik overweeg om
				Ik zie wel

Bijlage VII – Stadia van gedragsverandering

Fasen	Kenmerken	Blokkades	Houding	Gespreksvaardigheden
Voorbeschouwing	<ul style="list-style-type: none"> • ontkenning van probleem • anderen zeggen dat er problemen zijn • niet bereid om te veranderen • niet bezorgd 	<ul style="list-style-type: none"> • onvoldoende kennis van het probleem • laag gevoel van eigenwaarde, gevoel van falen • erkennung van probleem roept ontkenning op 	<ul style="list-style-type: none"> • accepteren en uitlokken • uitlokken, niet opleggen en trekken onvoorwaardelijke acceptatie • afstemmen op de ander openheid • nieuwsgierigheid en belangstelling 	<ul style="list-style-type: none"> • vragen stellen goed luisteren bevestigen en belonen verhelderen samenvatten confronteren mogelijkheden op rij zetten informeren bevestigen en belonen verhelderen samenvatten confronteren doelen op een rij zetten adviseren/informeren bevestigen en belonen
Overpeinzing	<ul style="list-style-type: none"> • erkennung van het probleem, nog niets aan doen • afwegen voor- en nadelen van verandering • onbezorgde houding 	<ul style="list-style-type: none"> • angst om de voordelen van de huidige situatie te verliezen het gevoel niet in staat te zijn te veranderen te laag gevoel van competentie 	<ul style="list-style-type: none"> • informatie geven veren van competentie tijd en ruimte geven 	
Besluit tot veranderen	<ul style="list-style-type: none"> • richting wordt ingestlagen besluit wel of niet veranderen valt • kent voor- en nadelen van verandering • wil er iets aan doen 	<ul style="list-style-type: none"> • allergisch voor opgedrongen oplossingen onzekerheid neemt weer toe het helemaal alleen op willen lossen te meegaand 	<ul style="list-style-type: none"> • ondersteunen keuze laten bij de ander ruimte en tijd geven positieve houding 	
Actieve verandering	<ul style="list-style-type: none"> • actieve inzet om probleem aan te pakken 	<ul style="list-style-type: none"> • ongeduld verklaringen buiten jezelf zoeken angst voor mislukken te hoge verwachtingen 	<ul style="list-style-type: none"> • motiverende ondersteuning aanbieden vergroten van zelfvertrouwen competentie versterken 	<ul style="list-style-type: none"> • bevestigen en belonen actief luisteren
Consolidatie	<ul style="list-style-type: none"> • beseft dat fouten maken mag steun zoeken bij belangrijke andere(n) in omgeving probleem is opgelost 	<ul style="list-style-type: none"> • zie bovenstaande kolom 	<ul style="list-style-type: none"> • motiverende ondersteuning bieden vergroten van zelfvertrouwen competentie versterken 	<ul style="list-style-type: none"> • bevestigen en belonen actief luisteren
Terugval	<ul style="list-style-type: none"> • terugvallen naar oude gedrag bij opnieuw optredende problemen 	<ul style="list-style-type: none"> • teleurstelling als het niet lukt neiging tot afhaken 	<ul style="list-style-type: none"> • ruimte en tijd geven accepteren en uitlokken (zie fase voorbeschouwing afstemmen) 	<ul style="list-style-type: none"> • contact blijven houden actief luisteren bevestigen en belonen stapje terug doen

VIA PERSPECTIEF

Bijlage VIII - Observatiebladen

Vechten of Dansen

Als je het gesprek volgt, waar denk je dat de interactie is op een continuüm van 1 (totaal Worstelen, strijden om controle) tot 6 (totaal Dansen: soepel samen bewegen, samenwerkend reageren op elkaar)?

Als je een verandering in de interactie opmerkt, schrijf op wat er gebeurde op het moment van de verandering.

Worstelen **Dansen** **Wat gebeurde er op het moment van de verandering?**

1	2	3	4	5	6	Interactieniveau aan het begin van het gesprek
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	

- Motiverende Gespreksvoering -

1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	

Observatieblad : Gereedheid van de cliënt

Als je het gesprek volgt, bepaal waar de cliënt in welke mate gereed is om te veranderen in de richting van het doelgedrag, van 1 (helemaal niet gereed) tot 7 (helemaal gereed voor de verandering). Als je een verandering in het niveau van gereedheid bemerkt, schrijf dan op wat de hulpverlener deed, vlak voor dat je de verandering opmerkte.

Wat deed de hulpverlener vlak voor de verandering?

Helemaal niet gereed

helemaal gereed

1	2	3	4	5	6	7	←Niveau van gereedheid aan het begin van het gesprek
1	2	3	4	5	6	7	
1	2	3	4	5	6	7	
1	2	3	4	5	6	7	
1	2	3	4	5	6	7	

- Motiverende Gespreksvoering -

1	2	3	4	5	6	7	
1	2	3	4	5	6	7	
1	2	3	4	5	6	7	

Observatieblad: Reflecties

Luister naar de reflecties van de hulpverlener, tel ze (/) en geef aan welk type reflectie je hoorde.

- A. Eenvoudige reflectie – in essentie een herhaling od iets andere woorden van wat de cliënt zei.
- B. Complexe reflectie – de hulpverlener gaat verder dan wat de cliënt zei, door de bedoeling te parafraseren, een gevoel weer te geven, een criterium te benoemen.
- C. Samenvattende reflectie – de hulpverlener verbindt twee of meer uitspraken van de cliënt in een samenvatting, waarbij uitspraken die de cliënt eerder in het gesprek heeft gedaan, worden betrokken.

Noteer, als je een heel goede reflectie hoort.

Type	Aantal	Goed(e) voorbeeld(en)
A. Eenvoudig		
B. Complex		
C. Samenvattend		

Observatieblad: Verandertaal van de cliënt

Luister naar voorbeelden van de 5 soorten verandertaal bij de cliënt. Als je er een hoort, zet een streepje (/) in het bijpassende vak. Noteer voorbeelden van de verschillende soorten verandertaal die je gehoord hebt.

Type verandertaal	Aantal (/)	Voorbeeld(en)
Wens om te veranderen		
Vermogen om te veranderen		
Redenen om te veranderen		
Behoefte om te veranderen		
Bereidheid om te veranderen		

Observatieblad: ORBS

Luister naar voorbeelden van het gebruik van de hulpverlener van ORBS reacties. Zet een streep (/) in het betreffende vak, als je ze hoort. Noteer voorbeelden van de verschillende ORBS- reacties die je hebt gehoord.

Reactie van de hulpverlener	Aantal (/)	Voorbeeld
Open vraag		
Reflectie		
Bevestiging		
Samenvatting		

Bijlage IX

Presentatie – Handout

Evaluatieformulier bijeenkomsten

Onderwerp: Cursus 'Integratief fysiotherapeutisch handelen'

Docent(en): / /

Algemeen Opmerkingen:	Slecht	Matig	Voldoende	Goed
De cursus als geheel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De aansluiting bij de "werkvloer"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informatie vooraf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cursus materiaal (mappen, handouts etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ontvangst	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inhoud dag				
Logische opbouw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heldere doelen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legitimering, onderbouwing, verwijzing literatuur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspirerend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Docent				
Duidelijke uitleg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aandacht voor reacties, vragen uit de groep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koppeling naar de "werkvloer"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persoonlijke presentatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deskundigheid docent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Docent				
Duidelijke uitleg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aandacht voor reacties, vragen uit de groep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koppeling naar de "werkvloer"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persoonlijke presentatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deskundigheid docent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Docent				
Duidelijke uitleg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aandacht voor reacties, vragen uit de groep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koppeling naar de "werkvloer"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persoonlijke presentatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deskundigheid docent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Slecht Matig Voldoende Goed
Opmerkingen:

Office management

Verwerking van mijn inschrijving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Herinnering 3 weken voor aanvang	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verstrekken onderwijsmateriaal vooraf en/of op de dag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

De cursuslokatie

De bereikbaarheid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De cursusruimte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De catering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Aansluiting bij uw persoonlijke doelen

Aansluiting bij uw verwachting vooraf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stimuleert tot reflectie op eigen functioneren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpt mij verdere scholingsbehoefte in kaart te brengen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Zou u deze cursus aanraden aan collega's? Waarom wel of niet?

Tips en/of adviezen:

Op- of aanmerkingen met betrekking tot cursuslokatie:

Indien u matig of slecht aan heeft gekruist kunt u uitleggen waarom: