

**Brief alcohol interventions:
Do counsellors' and patients'
communication characteristics
predict change?**

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Background

Brief alcohol interventions (BAI) are

- more effective than no counselling,
- associated with an approximate 20 % decrease in alcohol consumption
- often as effective as more intensive treatments

(Bertholet et al, 2005; Bien et al, 1993; Dunn et al, 2001; D'Onofrio & Degutis, 2002; Emmen et al, 2004)

Background

But: little is known about how it works

- **FRAMES:**
 - **Feedback**
 - **Responsibility**
 - **Advice**
 - **Menu of options**
 - **Empathy**
 - **Self-efficacy**

(Bien et al., 1993; Miller & Sanchez, 1993)

Background

Nothing about which of the counsellors' or patients' communication characteristics are most effective for triggering behaviour changes.

Background

- Some analyses of this type have been recently conducted for Motivational Interviewing (MI)
(Amrhein et al, 2003; Moyers et al, 2005; Moyers & Martin, 2006)
- To some degree, BAI include MI components and have the same target (i.e. behaviour change)
- ➔ Use of the Motivational Interviewing Skill Code (MISC) (Miller, 2000; Miller et al, 2003)

Aim

To describe BAI and to identify communication characteristics of patients and counsellors which predict changes on alcohol consumption 12 months later.

Study design

ED admissions during inclusion period, N=14763



Patients screened, N=8833



Patients with at-risk consumption, N=2191



Patients included, N=1366



BAI, N=486



Control 1, N=543



Control 2, N=337



Tape-recorded, N=166



Coded, N=97



Exclusion criteria:

Lost to follow-up (n=33) - Incomplete records (n=25) -
Mismatching of identification codes (n=7) - Insufficient
level of French (n=3) - Interventions and comments by a
patient's wife during the session (n=1)

Methods

- 97 tape-recorded motivational style BAI sessions
- Coding using the Motivational Interviewing Skill Code (MISC) version 2.0 (Miller et al, 2003)
- 3 outcome measures:
 - a) decrease of 20% or more in weekly drinking amount
 - b) decrease of 20% or more in binge drinking episodes per month
 - c) decrease of 20% or more in both a) and b).
- Bivariate analysis conducted for all measures of the MISC
- Significant or of borderline significance variables included in multiple regression models

MISC 2.0

1. Global ratings:

- First uninterrupted pass through each tape-recorded session
- The coders assigned a number on a 7-point Likert scale from 1 (low) to 7 (high) on four dimensions:
 - overall impression of counselor performance during the interview in *Acceptance*, *Empathy* and *MI Spirit*
 - patient highest level of *Self-exploration* period during the session

MISC 2.0

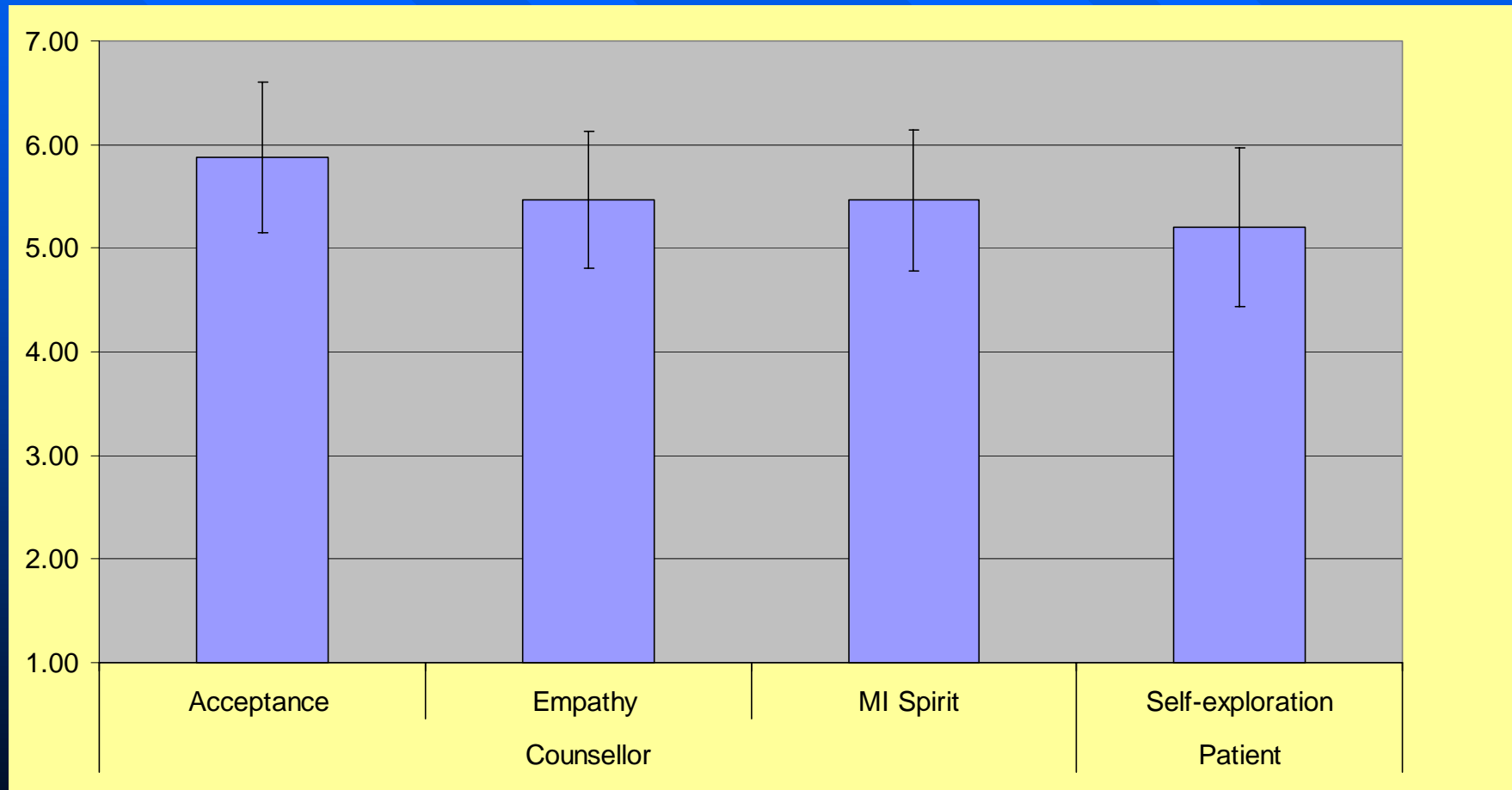
2. Behaviour counts :

- Second pass through the tape recordings
- Each utterance is given a code
 - 19 categories of counselor behavior
Advise with permission, Advise without permission, Affirm, Confront, Direct, Emphasize control, Facilitate, Filler, Giving information, Closed question, Open question, Raise concern with permission, Raise concern without permission, Simple reflections, Complex reflections, Reframe, Structure, Support, and Warn
 - Patient behavior is categorized in 6 kinds of "Change talk"
(1) Ability or inability to change, (2) Commitment to change or not to change, (3) Desire to change or not to change, (4) Need to change versus lack of need for change, or a need not to change, (5) Reasons to change or reasons not to change, and (6) Taking steps toward or away from change
and assigned a strength value ranging from
+5 (strong inclination toward change) to
-5 (strong inclination away from change)

Global scores

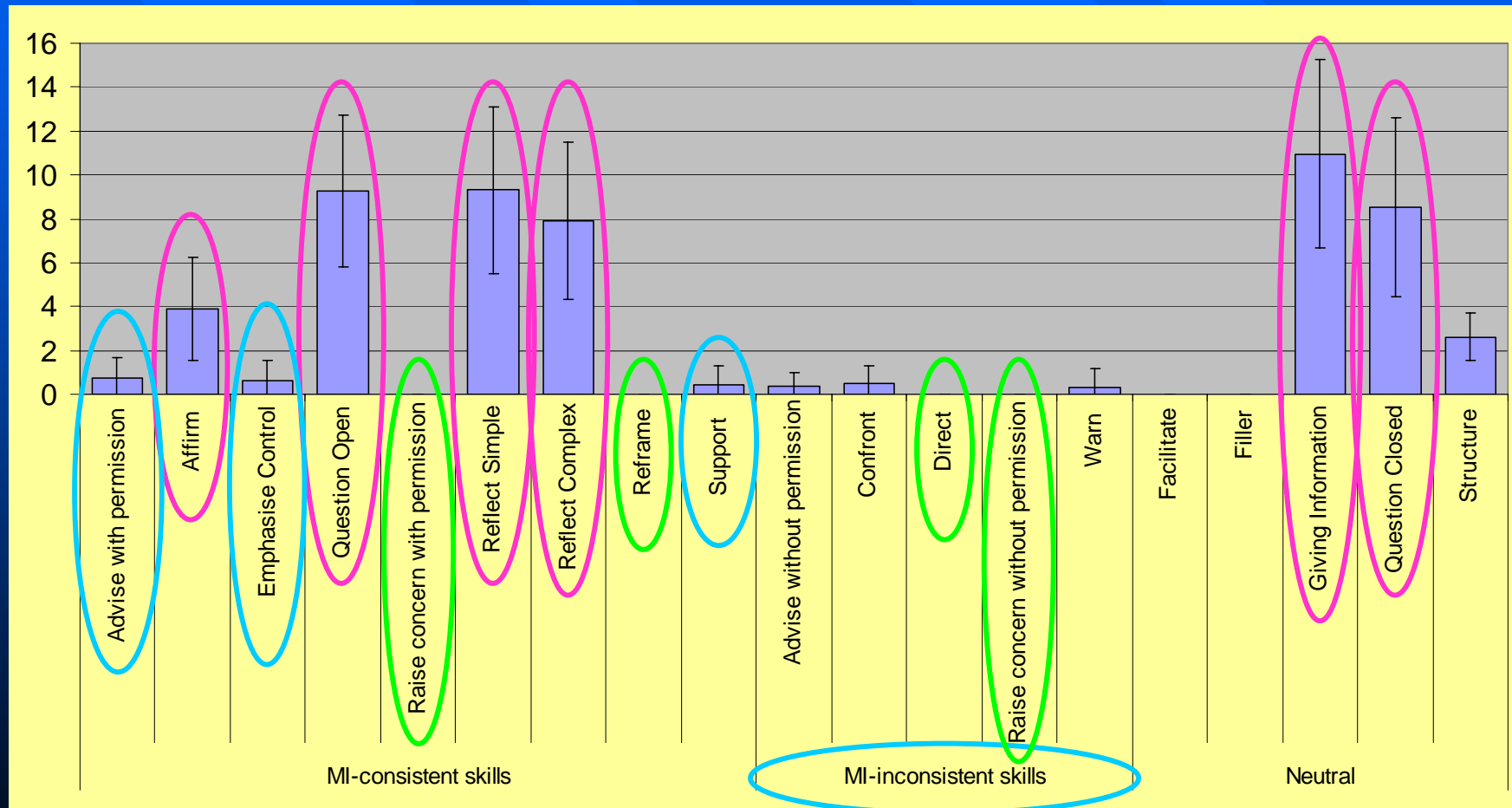
[7-points Likert scale, 1= "low level" – 7= "high level"]

Mean and SD



Counsellors' behaviour counts [Frequencies]

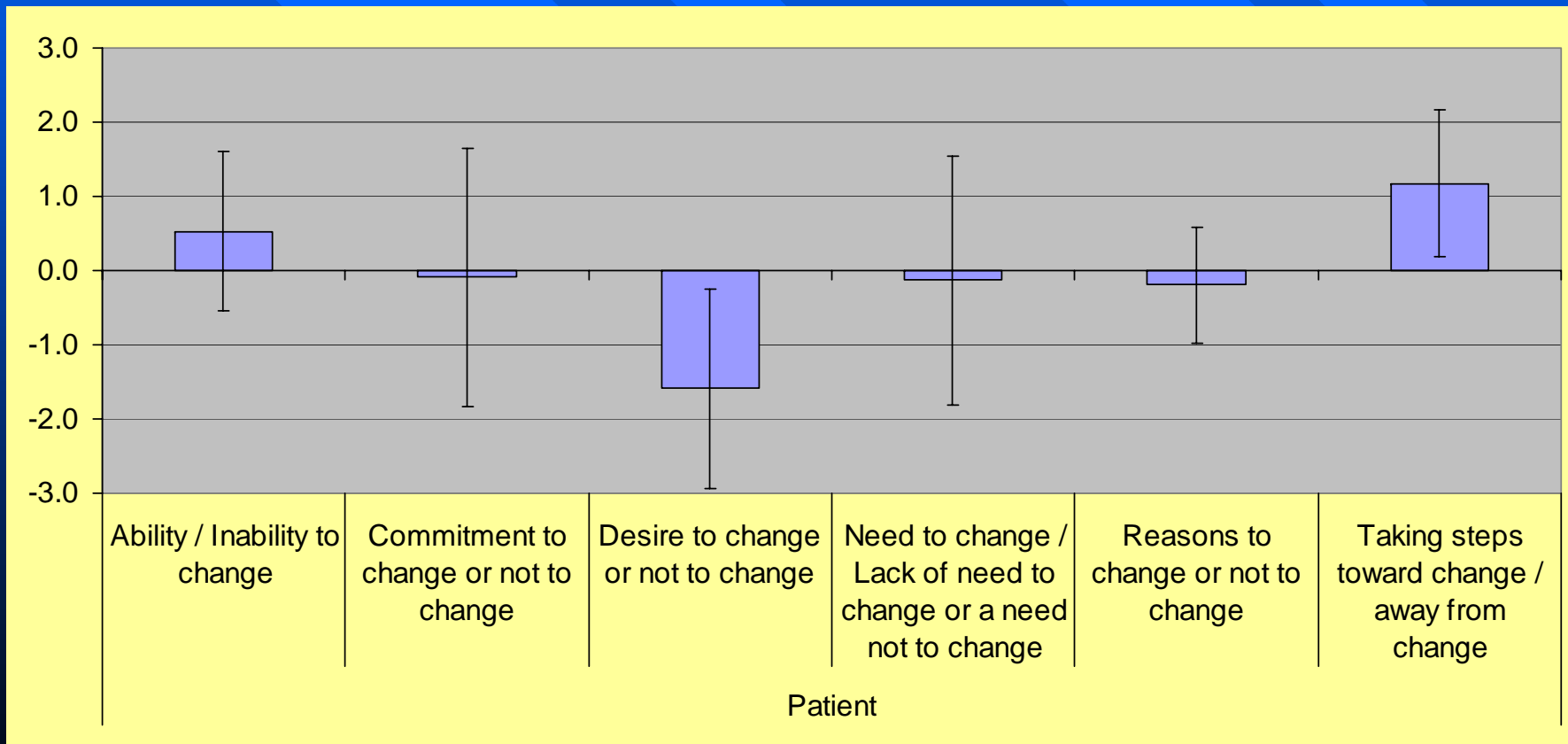
Mean and SD



Patients' change talk average strength [-5 to +5]

Mean and SD

Examples : « I absolutely don't want to quit » → Desire, -5
 « I think I can stop drinking every week-end » → Ability, +2



Differences in the 3 outcomes groups (p<0.1)

Decrease of 20% or more in weekly drinking amount		Yes	No	p
Counsellor	Acceptance [Likert scale 1-7]	6.0 (0.7)	5.7 (0.8)	0.09
	Empathy [Likert scale 1-7]	5.6 (0.6)	5.3 (0.7)	0.02
	MI Spirit [Likert scale 1-7]	5.6 (0.7)	5.4 (0.7)	0.05
	Advise with permission [Freq]	0.9 (1.1)	0.5 (0.8)	0.04
	Confront [Freq]	0.4 (0.7)	0.6 (0.8)	0.04
Patient	Ability / Inability to change [-5 to +5]	0.8 (1.0)	0.3 (1.1)	0.01
	Commitment to change or not to change [-5 to +5]	0.2 (1.7)	-0.4 (1.7)	0.10

Decrease of 20% or more in binge drinking episodes per month		Yes	No	p
Counsellor	Empathy [Likert scale 1-7]	5.6 (0.7)	5.4 (0.6)	0.06
	Advise with permission [Freq]	0.8 (0.9)	0.6 (1.0)	0.07
	Affirm [Freq]	4.4 (2.4)	3.5 (2.3)	0.05
Patient	Ability / Inability to change [-5 to +5]	0.8 (1.0)	0.4 (1.1)	0.08
	Taking steps toward change / away from change [-5 to +5]	1.5 (0.8)	1.0 (1.1)	0.03

Decrease of 20% or more in both weekly drinking amount <u>and</u> binge drinking episodes per month		Yes	No	p
Counsellor	Empathy [Likert scale 1-7]	5.7 (0.6)	5.4 (0.6)	0.006
	MI Spirit [Likert scale 1-7]	5.7 (0.6)	5.4 (0.7)	0.02
	Advise with permission [Freq]	0.9 (0.9)	0.6 (1.0)	0.04
	Affirm [Freq]	4.5 (2.1)	3.6 (2.4)	0.04
Patient	Ability / Inability to change [-5 to +5]	0.9 (1.1)	0.4 (1.1)	0.01
	Desire to change or not to change [-5 to +5]	-1.2 (1.5)	-1.8 (1.2)	0.05

Logistic regression: Decrease of 20% or more in weekly drinking amount

		Exp(B)	Sig.
<i>Constant</i>		0.06	0.41
Adjustment variables	Age	0.98	0.28
	Sex	2.59	0.14
	AUDIT Score \geq 12	0.90	0.85
Counsellor	Acceptance	1.19	0.74
	Empathy	1.21	0.72
	Advise with permission	1.32	0.33
	Confront	0.65	0.32
Patient	Ability / Inability to change	1.76	0.02
	Commitment to change or not to change	1.12	0.41

Logistic regression:
**Decrease of 20% or more in binge drinking episodes
per month**

		Exp(B)	Sig.
	<i>Constant</i>	0.02	0.12
Adjustment variables	Age	1.01	0.65
	Sex	1.16	0.80
	AUDIT Score \geq 12	0.97	0.96
Counsellor	Empathy	1.42	0.38
	Advise with permission	1.13	0.65
	Affirm	1.06	0.61
Patient	Ability / Inability to change	1.27	0.27
	Taking steps toward change / away from change	1.52	0.10

Logistic regression:
**Decrease of 20% or more in both weekly drinking
amount and binge drinking episodes per month**

		Exp(B)	Sig.
	<i>Constant</i>	0.00	0.03
Adjustment variables	Age	0.98	0.31
	Sex	1.32	0.65
	AUDIT Score \geq 12	0.38	0.12
Counsellor	Empathy	1.38	0.70
	MI Spirit	2.25	0.26
	Advise with permission	1.17	0.63
	Affirm	1.08	0.53
Patient	Ability / Inability to change	1.80	0.02
	Desire to change or not to change	1.60	0.02

Conclusions

- Variables best predicting change are variables reflecting patients' change talk strengths (Ability/Desire to change)
- Lack of significant effects of counsellors' skills
- Change in binge drinking seems to be only slightly, if at all, related with BAI content

Discussion

- Patient must desire and feel able to change, for a change to happen
- Focus on the importance of Change Talk

Discussion

- Counsellors' skills were related with outcomes at the bivariate level, not in the regression models.
- A plausible explanation for this might be that counselor skills are correlated with patient change talk expressions and partly depend on patient behaviors.

For example, counselors might be more empathic and motivational, when they view a patient as less resistant

Discussion

- In this study, the communication skills of counsellors during BAI seem to have little impact themselves on outcomes
- This does not diminish the importance of BAI since
 - an environment where patients can begin to think and talk about change is vital
 - the counsellor may be a trigger for reinforcing change talk



Thank you for your attention!

Sequential analysis using GSEQ software (Bakeman & Quera, 1995)

Observed frequencies				
Given	Target			
	Advise with permission	Confront	Ability to change 1-3	Neutral/Follow
Odds ratios (CI)				
Given	Target			
	Advise with permission	Confront	Ability to change 1-3	Neutral/Follow
Advise with permission	3.7 (1.16;11.77)	0 (0;NaN)	2.91 (1.07;7.94)	1.63 (1.12;2.37)
Confront	0 (0;NaN)	0 (0;NaN)	2.05 (0.5;8.39)	4.42 (2.96;6.59)
Ability to change 1-3	0 (0;NaN)	3.14 (0.99;9.99)	2.57 (1.13;5.85)	0.5 (0.33;0.77)
Neutral/Follow	2.14 (1.5;3.05)	1.65 (1.05;2.58)	0.6 (0.4;0.89)	1.03 (0.94;1.12)