How do counselor and 20-year old subject speech articulate during brief motivational interventions?

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Background

- Research on BMI for young people has shown promising results

  (Tevyaw & Monti, 2004; Grenard, Ames, Pentz, & Sussman, 2006; Toumbourou et al., 2007)

- However, little is known about

  – how it works

  – which elements of the counselor and youth communication behaviors during the intervention are most effective in triggering behavior changes

Background
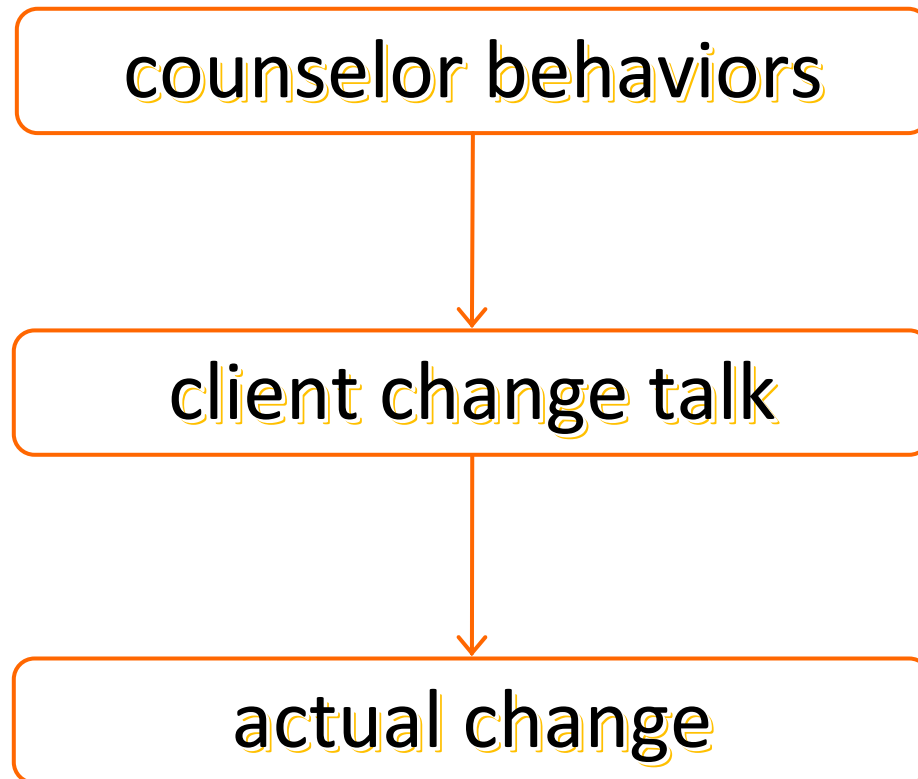
- Main hypothesis: causal chain (Moyers & Martin, 2006)

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┌─────────────────────────┐
│   counselor behaviors   │
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            │
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┌─────────────────────────┐
│    client change talk   │
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            │
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┌─────────────────────────┐
│      actual change      │
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Background

- Empirical validation

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│     actual change       │
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Whole chain:
- Moyers et al, 2007

Background

- **Empirical validation**

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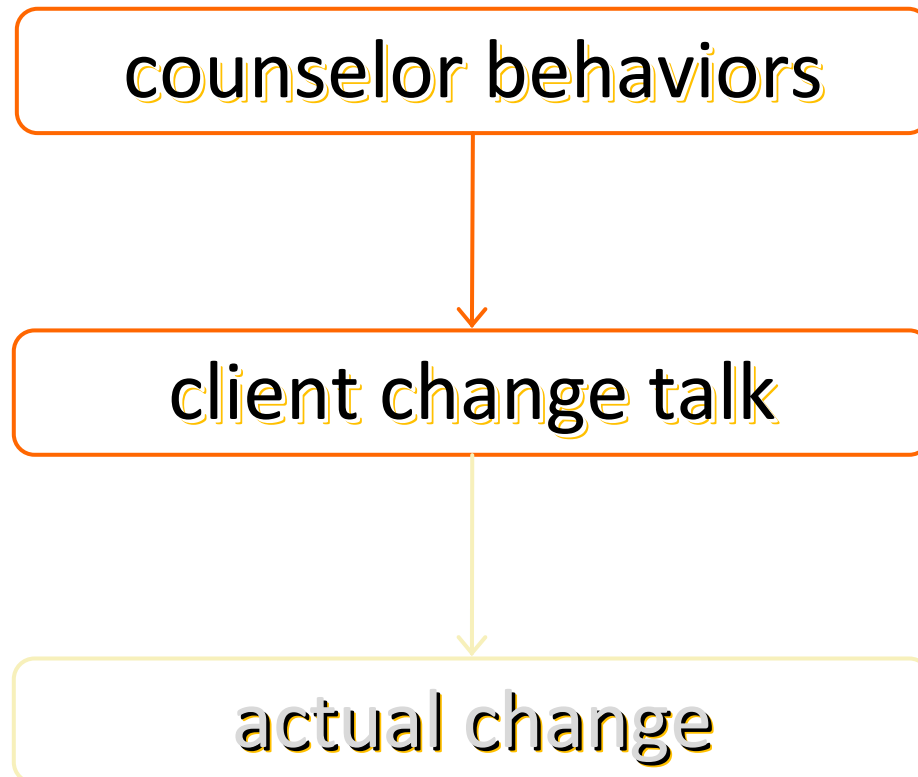
- Catley et al, 2006
- Moyers & Martin, 2006
- Gaume et al, 2008a

Background

- Empirical validation
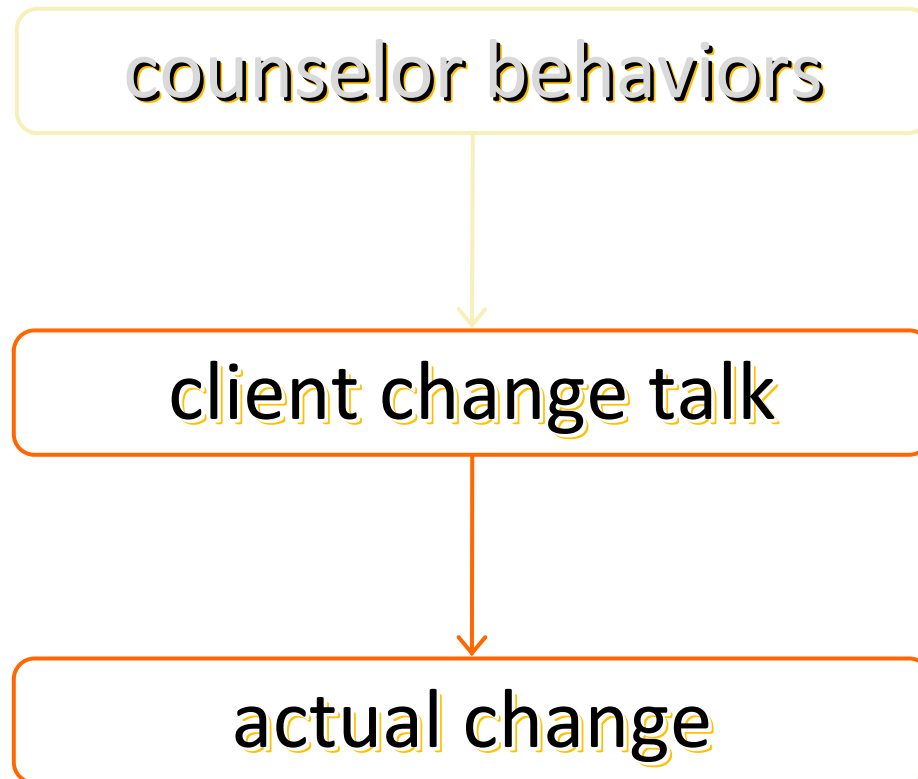
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- Moyers et al, 2007

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- Amrhein et al, 2003
- Strang & McCambridge, 2004
- Gaume et al, 2008b
- Baer et al, 2008
- Hodgins et al, 2009

Background

- **Empirical validation with young adults**
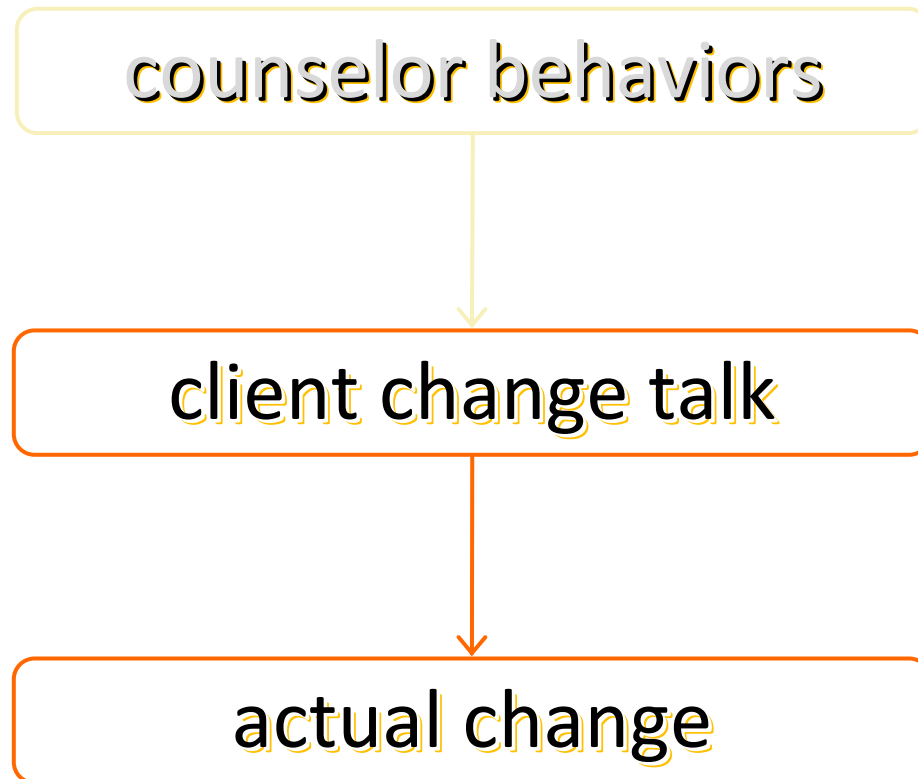
counselor behaviors

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client change talk

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actual change

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Aim

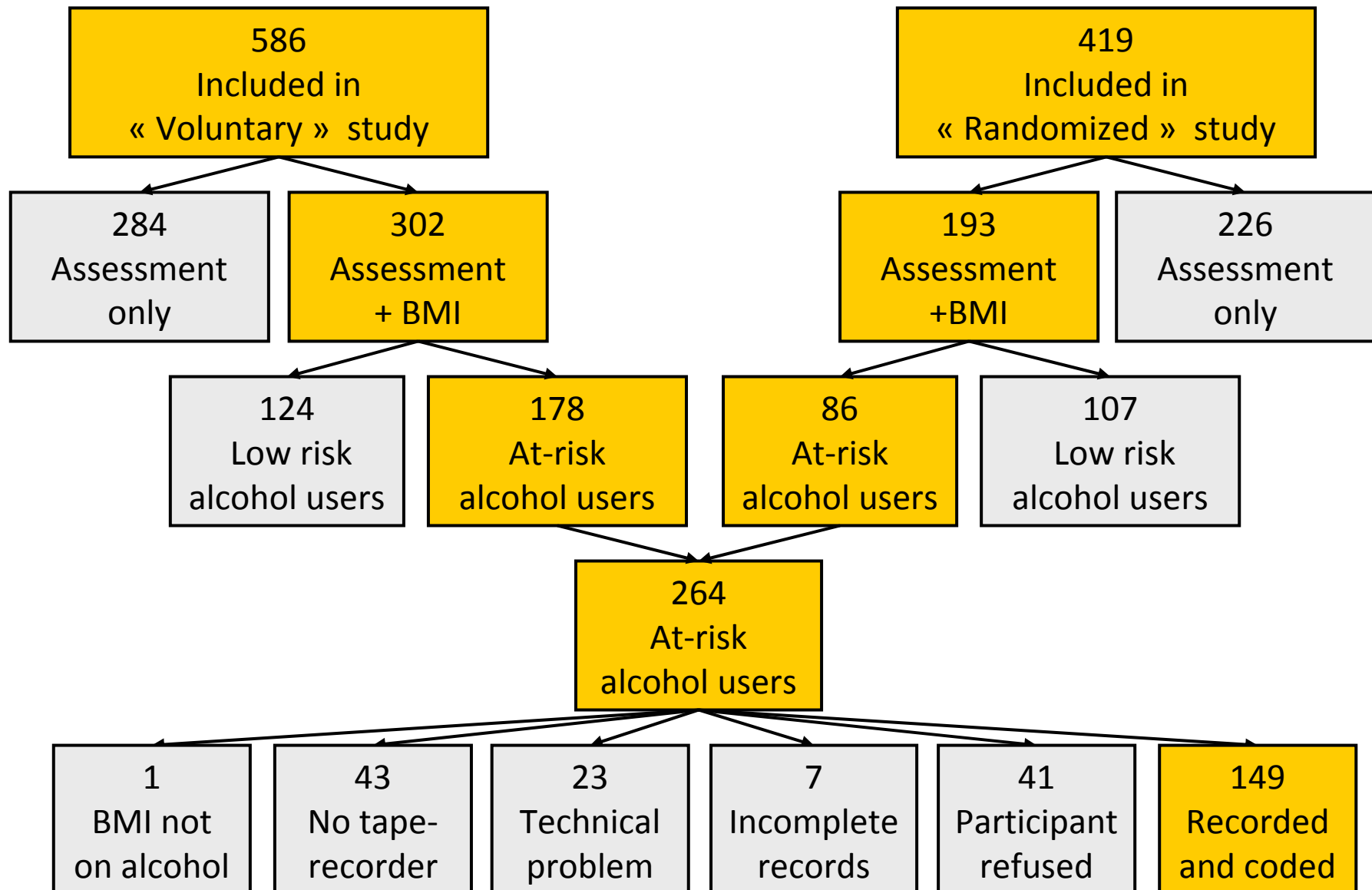counselor behaviors

↓

client change talk

↓

actual change

Investigate counselor and subject speech articulation during BMI among young men with unhealthy alcohol use

Sample

- Subjects from 2 randomized controlled trials

- Swiss army recruitment centre at Lausanne

- French-speaking men at age 20

Subjects inclusion profile

Coding process
Motivational interviewing skill code (MISC) 2.1

1. Global ratings (4 scales)

2. Behavior counts :

- Counselor - 19 categories

  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*

- Subject - 8 categories

  7 types of change talk : Ability or inability to change, Commitment to change or not to change, Desire to change or not to change, Need to change versus lack of need for change, or a need not to change, Reasons to change or reasons not to change, Taking steps toward or away from change, Other

  Neutral/follow (no link with alcohol topics)

Coding process - categorization

➢ Counselor behaviors summarized in 3 categories:

– MI-consistent behaviors
(advise with permission, affirm, emphasize control, open question, simple and complex reflections, reframe, and support)

– MI-inconsistent behaviors
(advise without permission, confront, direct, raise concern without permission, and warn)

– Other categories of counselor behaviors
(facilitate, filler, giving information, closed question, raise concern with permission, and structure)

➢ Subject language summarized in 3 categories:

– Change talk
(Ability, Commitment, Desire, Need, Reasons, Taking steps, Other **expressed in the direction of change**)

– Counter change talk
(Ability, Commitment, Desire, Need, Reasons, Taking steps, Other **expressed in the direction of the status quo**)

– Following and neutral utterances

Transition analysis – Observed frequencies

Initial event \ Subsequent event	MI-consistent	Other	MI-incon-sistent	Change talk	Follow / Neutral	Counter change talk	Total
MI-consistent	1074	316	5	3227	2733	2035	9390
Other	293	190	3	437	789	297	2009
MI-inconsistent	12	3	0	4	17	15	51
Change talk	3270	479	8	2148	460	754	7119
Follow / Neutral	2571	727	18	560	1376	492	5744
Counter change talk	2129	269	17	744	434	1684	5277
Total	9349	1984	51	7120	5809	5277	29590

Transition likelihood estimation

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Transition likelihood estimation

Initial event \ Subsequent event	MI-consistent	Other	MI-inconsistent	Change talk	Not Change talk		Total
MI-consistent	1074	316	5	3227	2733 + 2035=4768		9390
Not MI-consistent	293	190	3	437 + 4 =441	789 + 297 + 17 + 15 =1118		2009
	12	3	0				51
Change talk	3270	479	8	2148	460	754	7119
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Odds ratio= $(3227 \times 1118)/(4768 \times 441)$ =1.72

Counselor to subject transition likelihood

Counselor

MI-Inconsistent

MI-Consistent

Other counselor behaviors

Subject

Change Talk

Counter Change Talk

Neutral / Follow
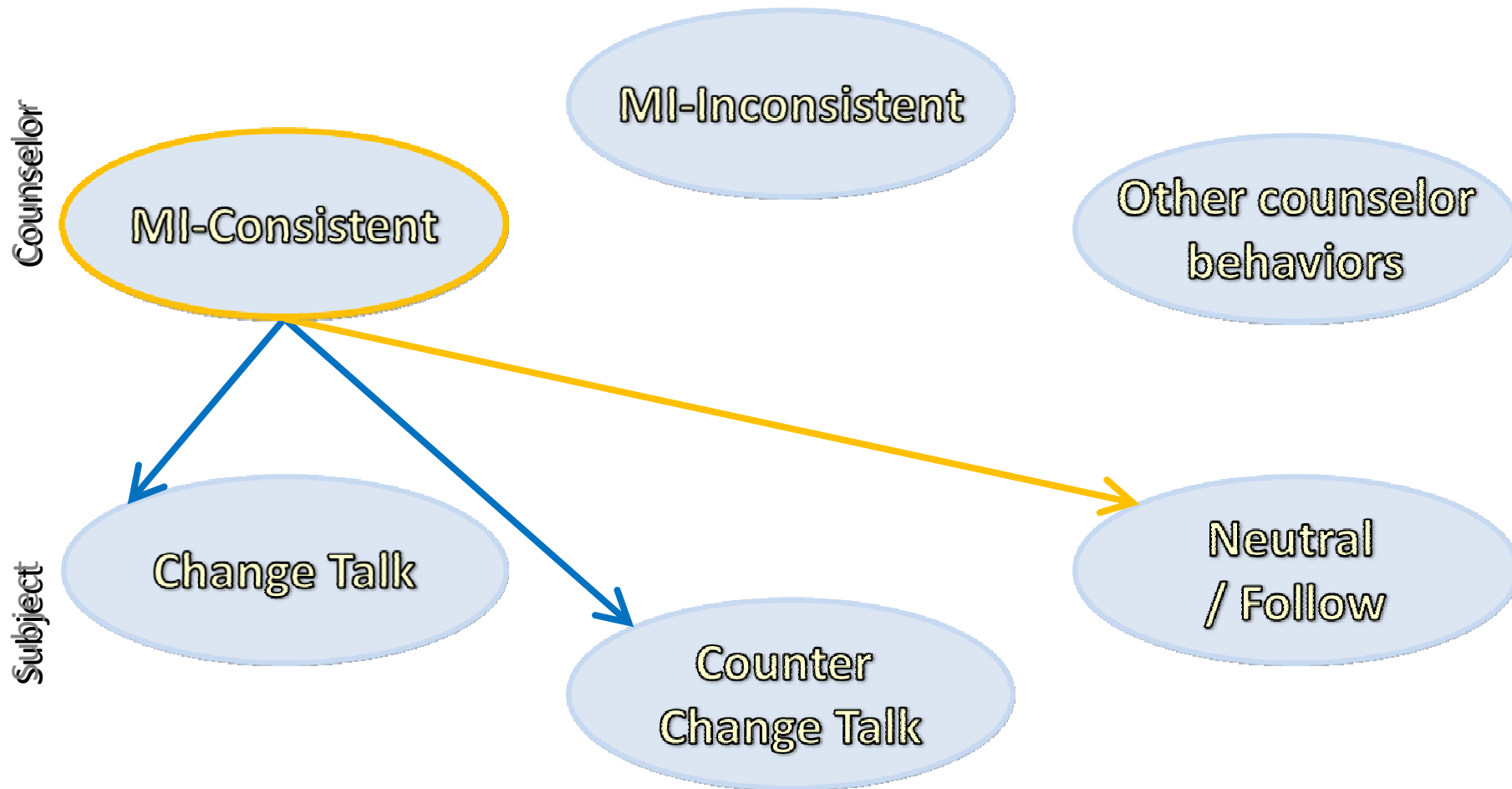
→ Significantly more likely than expected by chance

→ Significantly less likely than expected by chance

⋯▸ Not significant
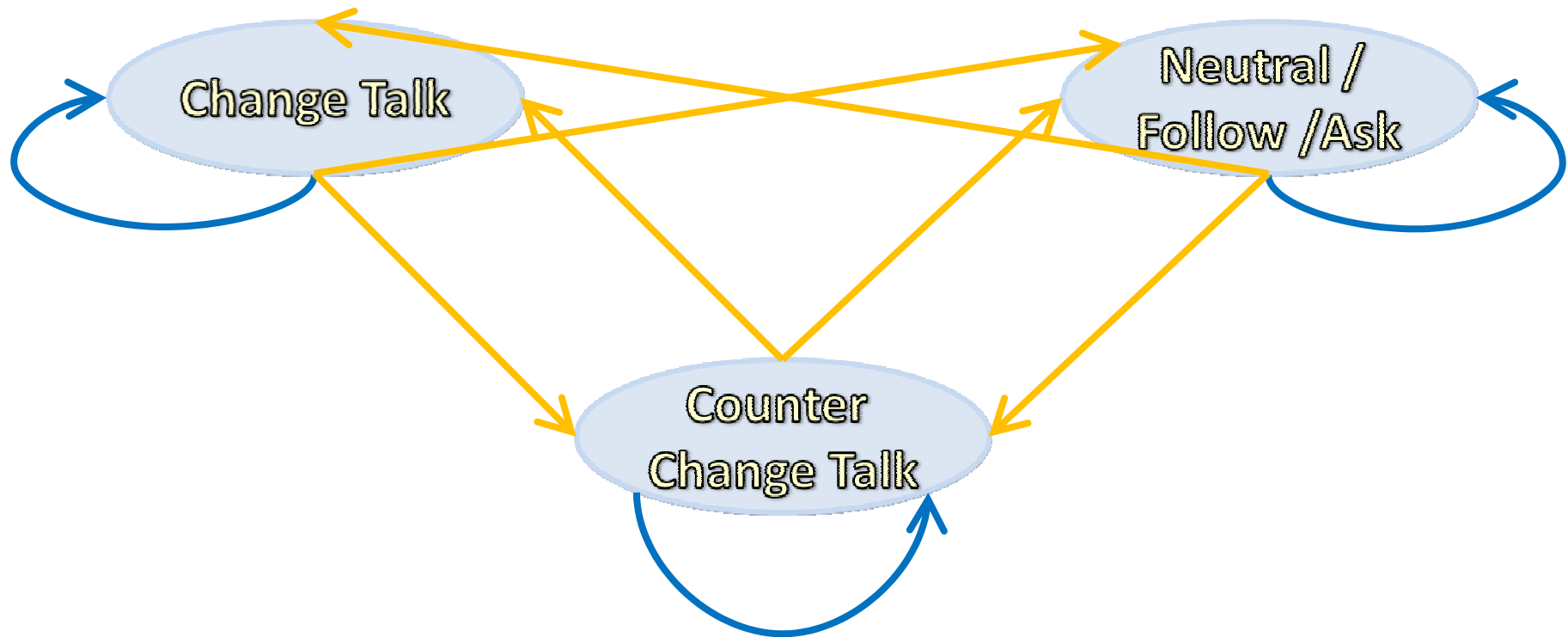
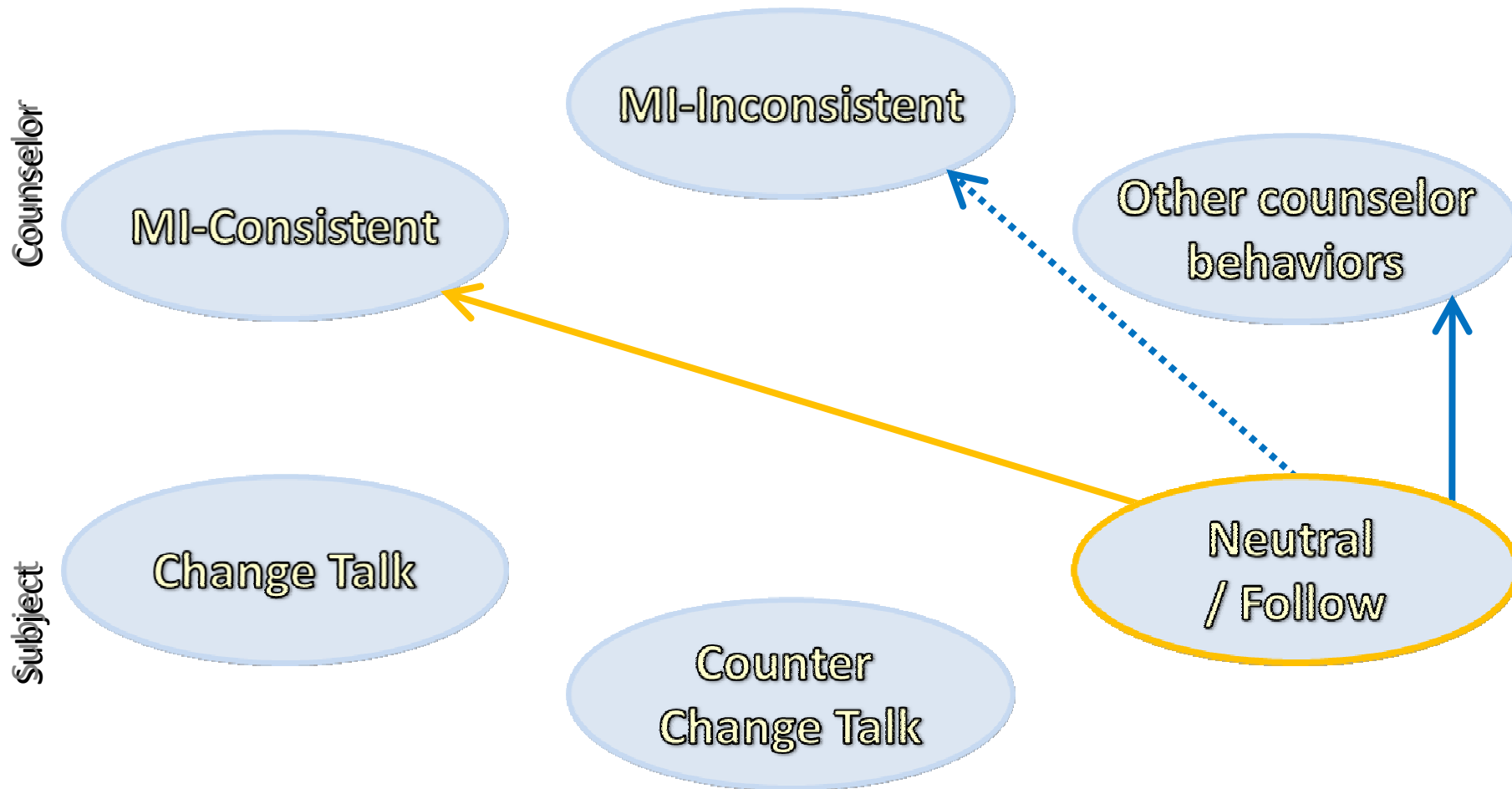# Counselor to subject transition likelihood
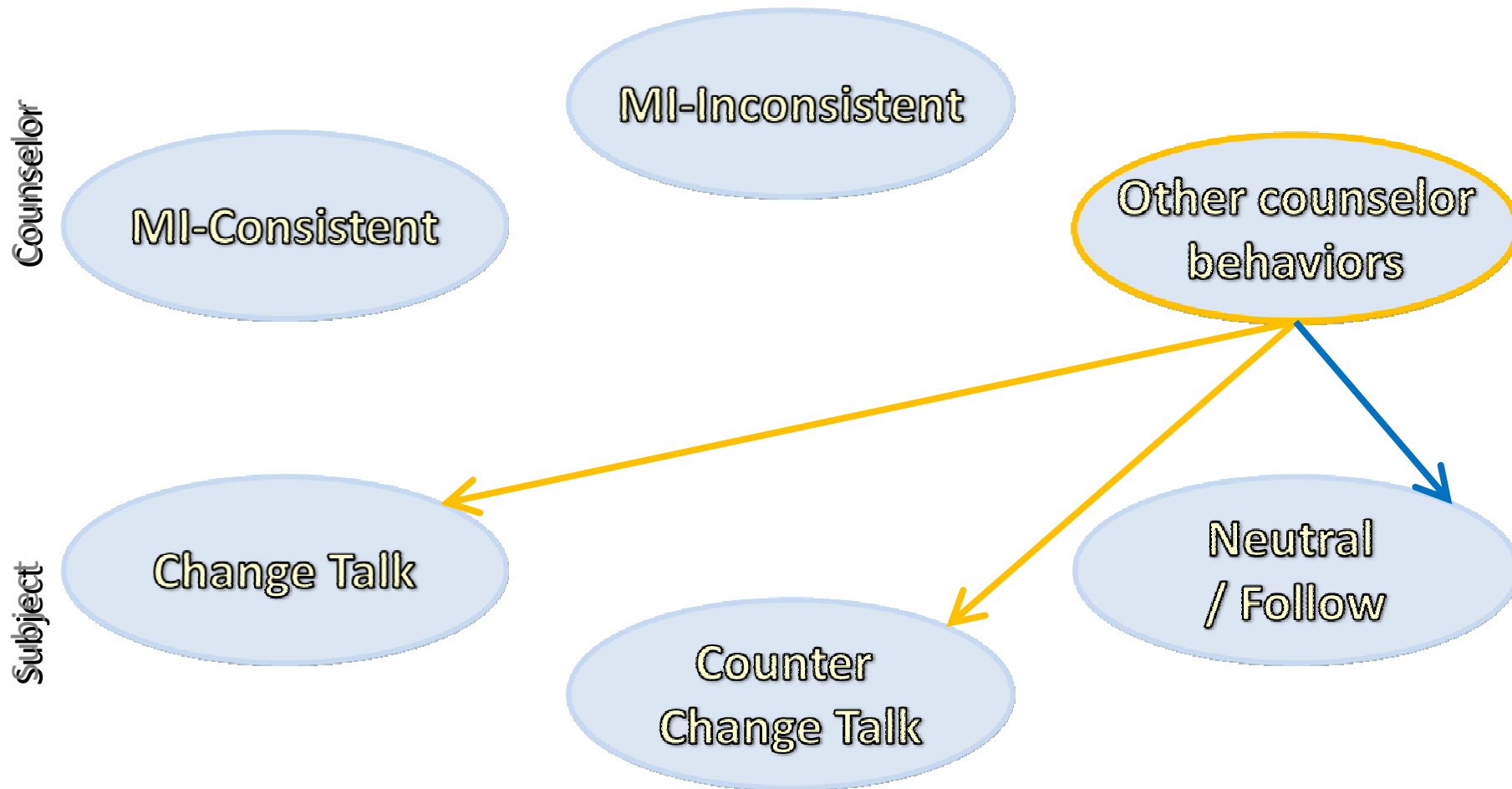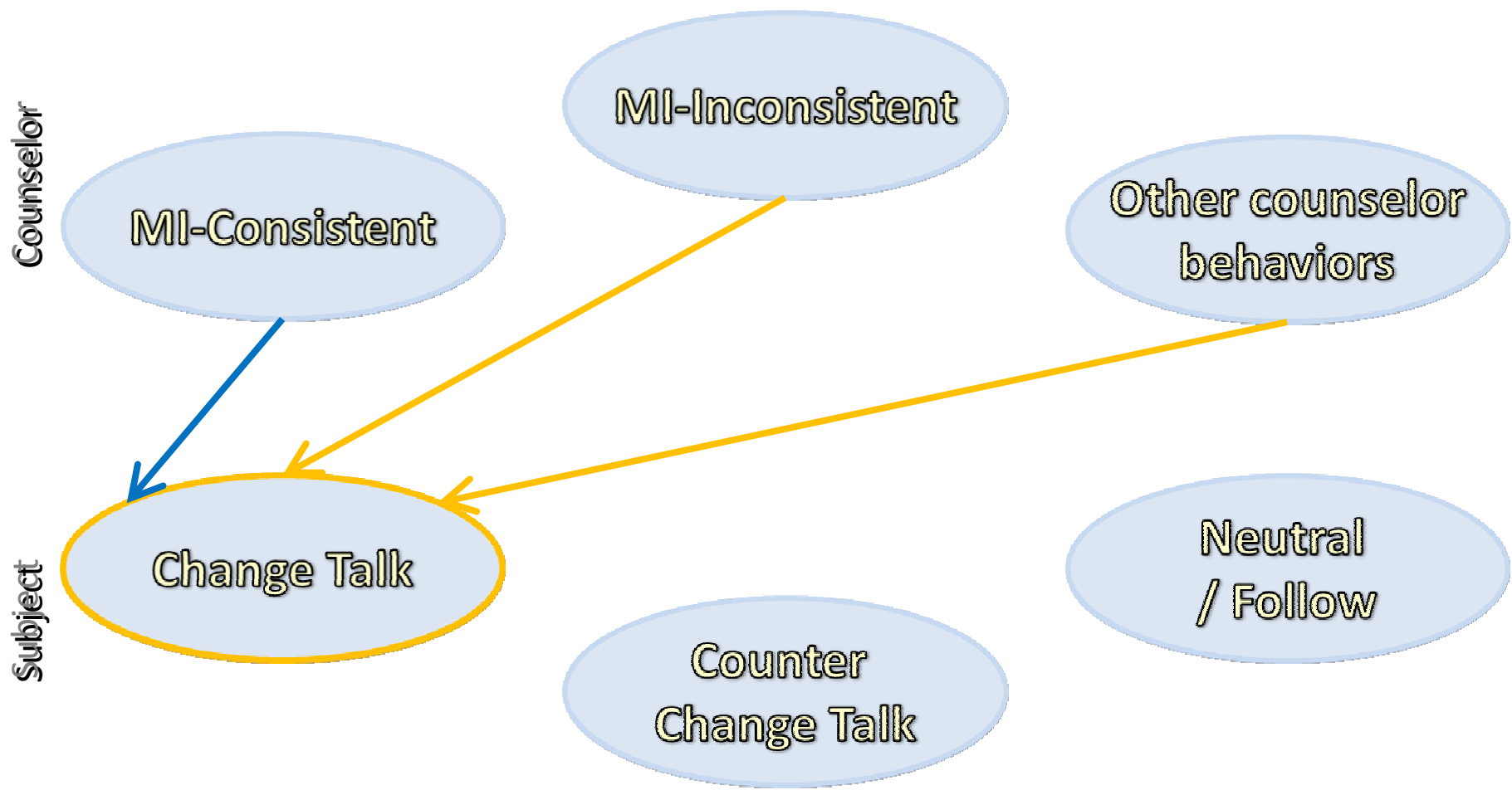
Subject to subject transition likelihood

Change Talk

Neutral / Follow /Ask

Counter Change Talk

→ Significantly more likely than expected by chance

→ Significantly less likely than expected by chance

Subject to counselor transition likelihood

Counselor

Subject

MI-Inconsistent

MI-Consistent

Other counselor behaviors

Change Talk

Counter Change Talk

Neutral / Follow

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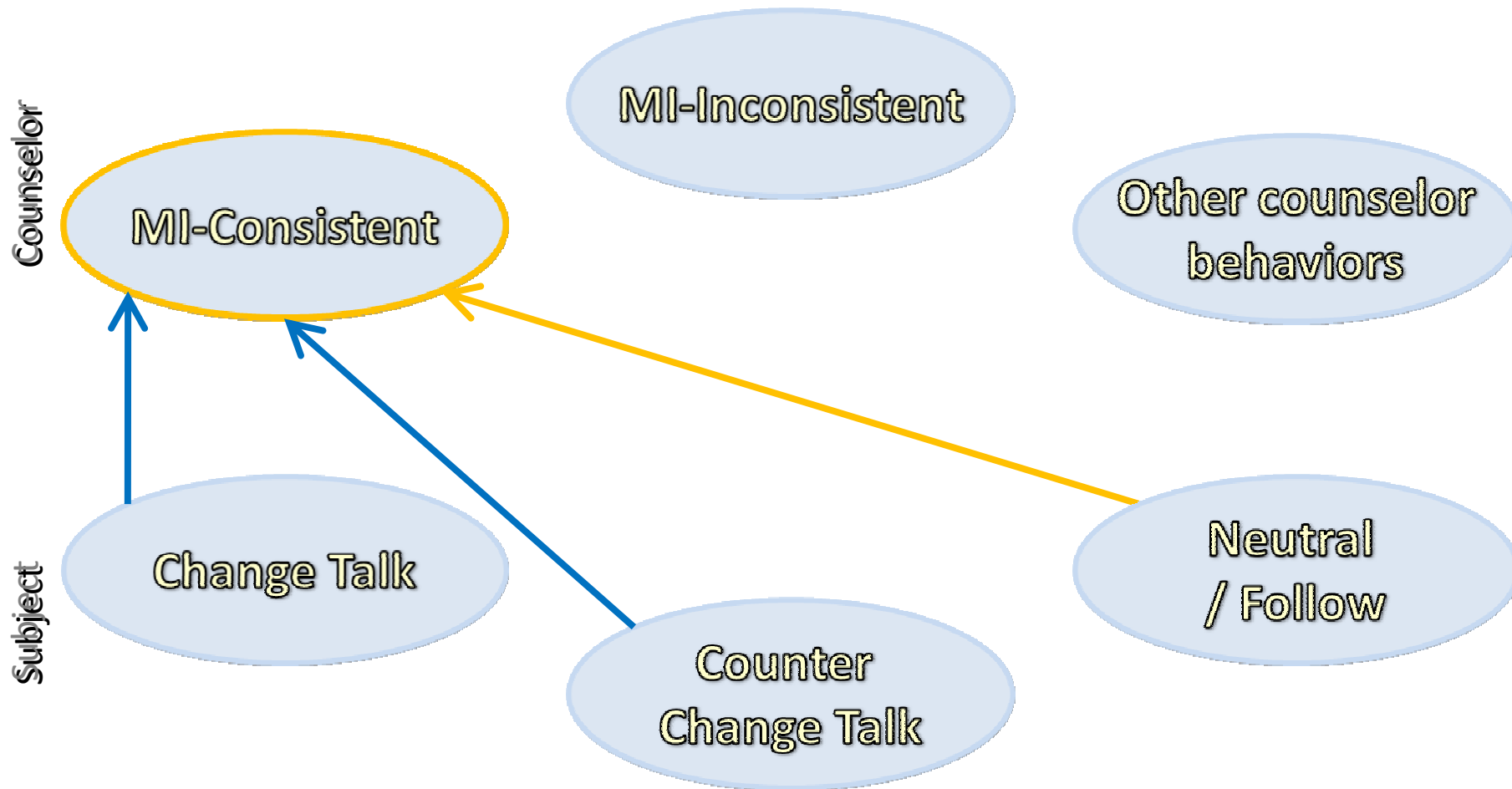# Subject to counselor transition likelihood

Counselor

MI-Inconsistent

MI-Consistent

Other counselor behaviors

Subject

Change Talk

Counter Change Talk

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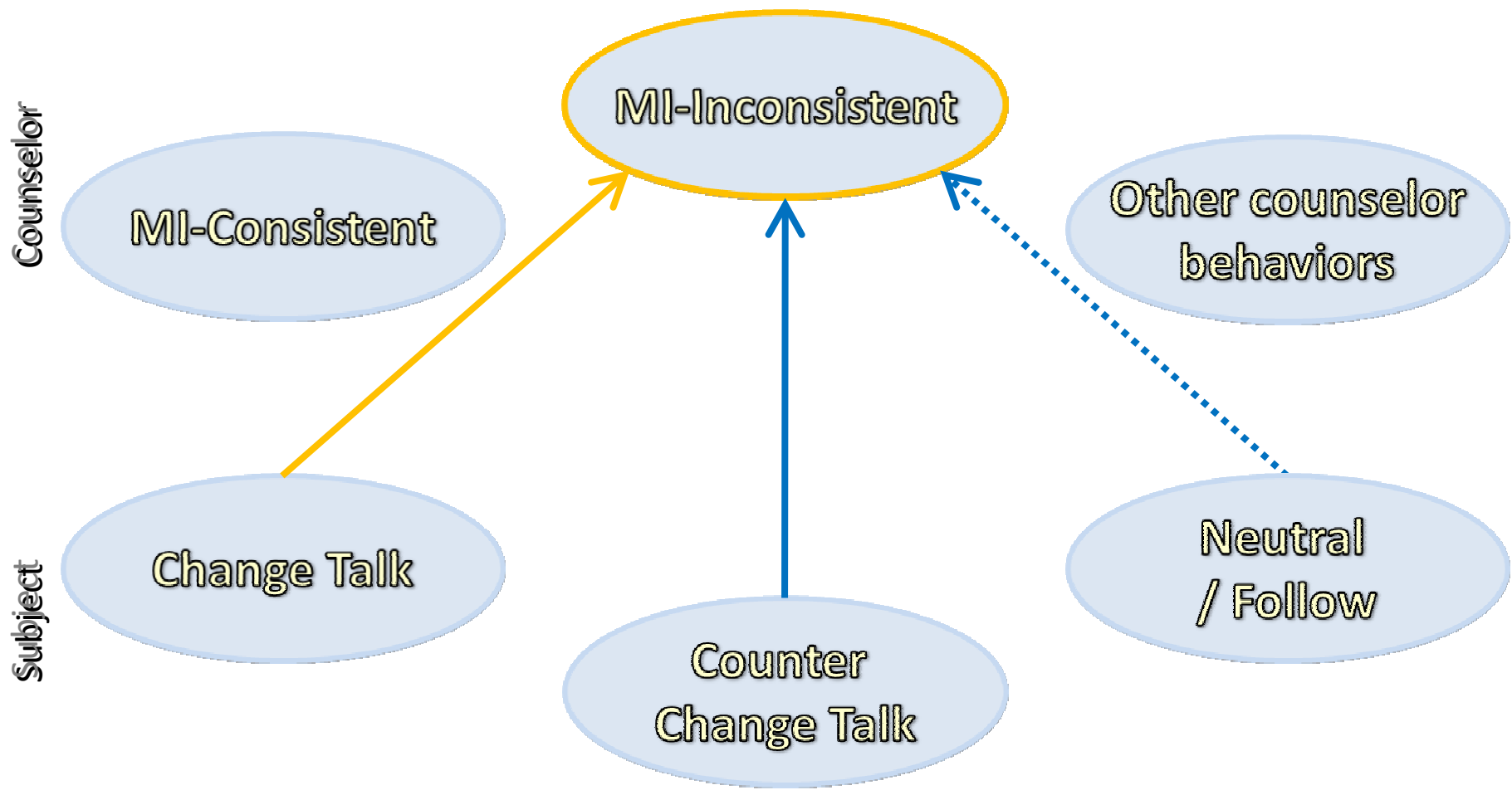# Subject to counselor transition likelihood

Counselor

MI-Inconsistent

MI-Consistent

Other counselor behaviors

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Subject to counselor transition likelihood

Subject to counselor transition likelihood

Counselor

MI-Consistent

MI-Inconsistent

Other counselor behaviors

Subject

Change Talk

Counter Change Talk

Neutral / Follow

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⋯> Not significant

Conclusions

- MI-consistent behaviors were the only counselor behaviors that lead to subject change talk
- MI-inconsistent behaviors were only significantly likely to be followed by Counter change talk
- Subject speech also had an influence on counselor behaviors (particularly Change talk → MI-consistent behaviors; Counter change talk →MI-inconsistent)
- Subject language types more often following each other (i.e. Change talk to change talk, Counter change talk to Counter change talk, Follow/Neutral to Follow/Neutral)

Discussion

- Usefulness of MI to elicit change talk in young men

- BMI = complex interaction where counselors are also influenced by subject behaviors

- Further perspectives:

  - link change talk to outcome measures in our sample

  - construct a model capturing the whole process (counselor behaviors → subject speech → subject change)

  - replicate in other settings

Thank you for your attention!

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