



Non-drinking as deviant!

First attempts to use the relational responding task to alter drinking identity in an experimental study

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Institutions and funding:



Research Priority Area Yield



University of Amsterdam

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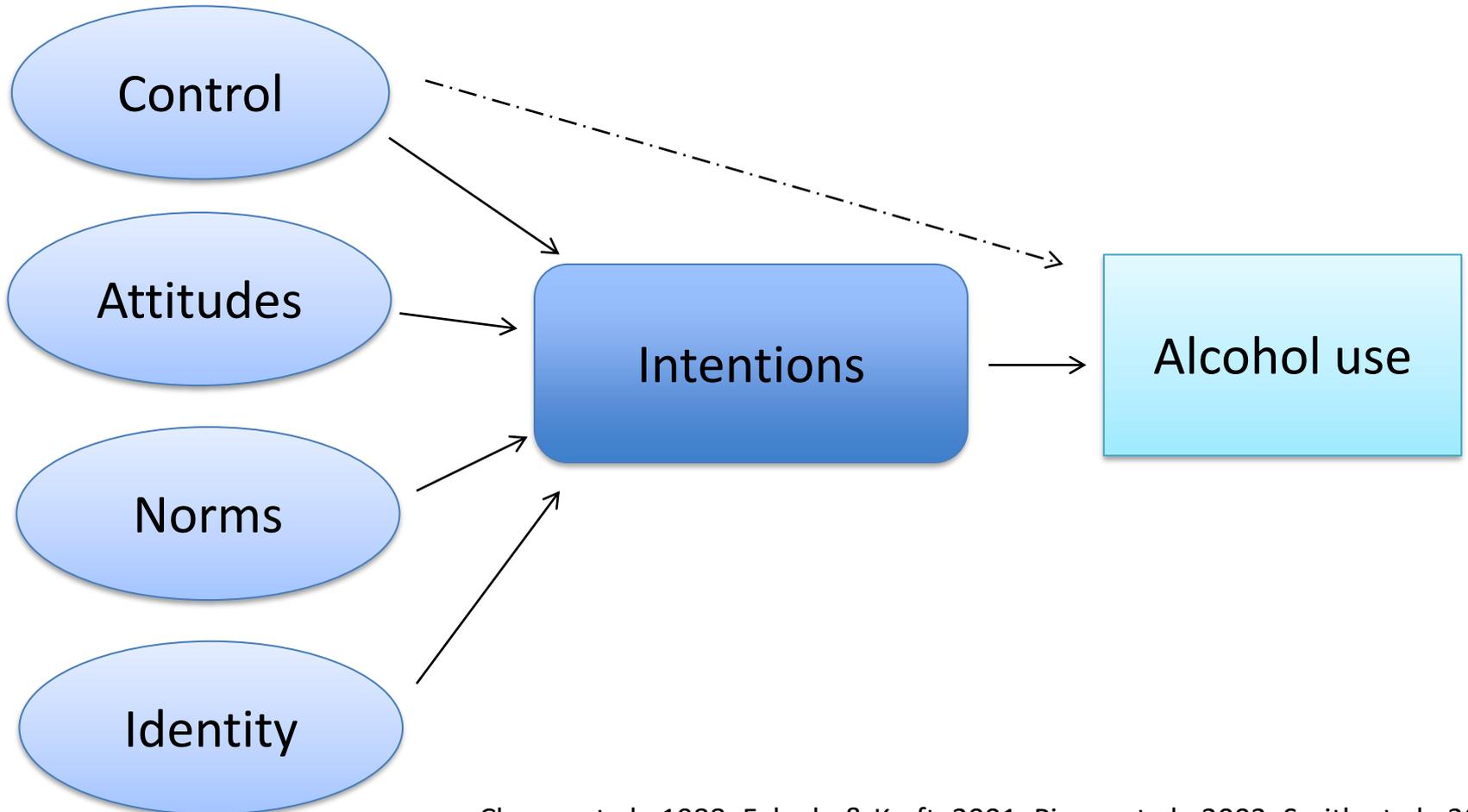


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Prof. Reinout Wiers

Theory of planned behaviour and identity



Identity

- Self-perception theory of personality:
Inference from behaviour about self
- Alcohol identity: the extent to which an individual perceives drinking alcohol to be a defining characteristic of his or her self-identity
- ...Yet, not all behaviour is intentional.

Bem, 1972



Cognitive-Motivational Processes



Risky behavior as self-defining (self-identity; difficult to change behaviour)

Implicit Drinking Identity

- Indirectly assessed (IAT)
- Strong and reliable predictor of alcohol consumption
- Explicitly assessed drinking identity

Charng et al. 1988; Greenwald et al., 1998; Lindgren et al., 2013; 2014; 2016



Why change drinking identity?

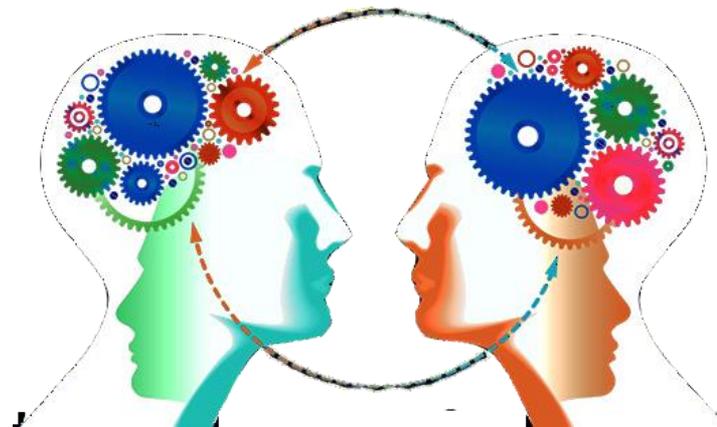
- Culturally drinking part of history and experience
- Identity exploration, evolving
- Changing believes and motivations about alcohol -> Changing drinking habits -> changing believes and motivations about alcohol -> changing drinking habits
- Reducing identification as drinker
 - Target for prevention / intervention

How to change drinking identity?

- No effects of CBM/AAT training (Lindgren et al., 2015)
 - No alteration of associations between the self and drinking
- Relational Responding Task (De Houwer et al., 2015)
 - Strength of an association between two concepts (e.g., drinker/abstainer vs. me/not me) but it also allows for specification at the relational level
 - Respond in-line with certain beliefs

Study aims

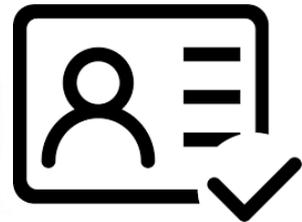
- Can we change implicit drinking identity with a training version of the RRT?
- Does the RRT training impact the participants' urge to drink & observed alcohol consumption?



Hypotheses

1. 'Me+abstainer' < Implicit drinking Identity
2. 'Me+abstainer' < Urge to drink
3. 'Me+abstainer' < Observed alcohol consumption

As compared to 'Me+drinker' condition



Sample

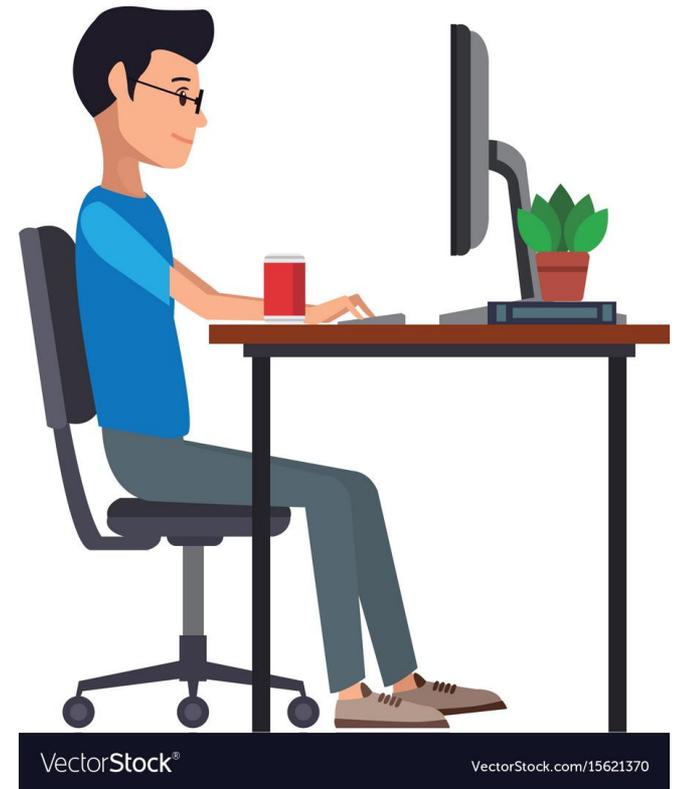
- 18-30 years (N = 100)
- 78 females, 22 males
- Mean age 20.6 ($SD=2.7$)
- Mean AUDIT 9.28 ($SD = 4.76$)
- Drank beer in last 6 months
- Native language all Dutch



Design

Two conditions:

- 1) Training: Respond as abstainer
- 2) 'Control': Respond as drinker



Training

Relational Responding Task

- Instructions to respond in line with certain beliefs
- Use of statements allow for specification at the relational level (e.g., “Drinking is an important part of me”)
- Response options: true vs. false



TRUE

FALSE

Drinking is an important part of me.

20 target statements:

-10 statements implying identification as a drinker

-10 statements implying identification as non-drinker

Training Relational Responding Task

10 blocks: 3 practice blocks & 7 training blocks

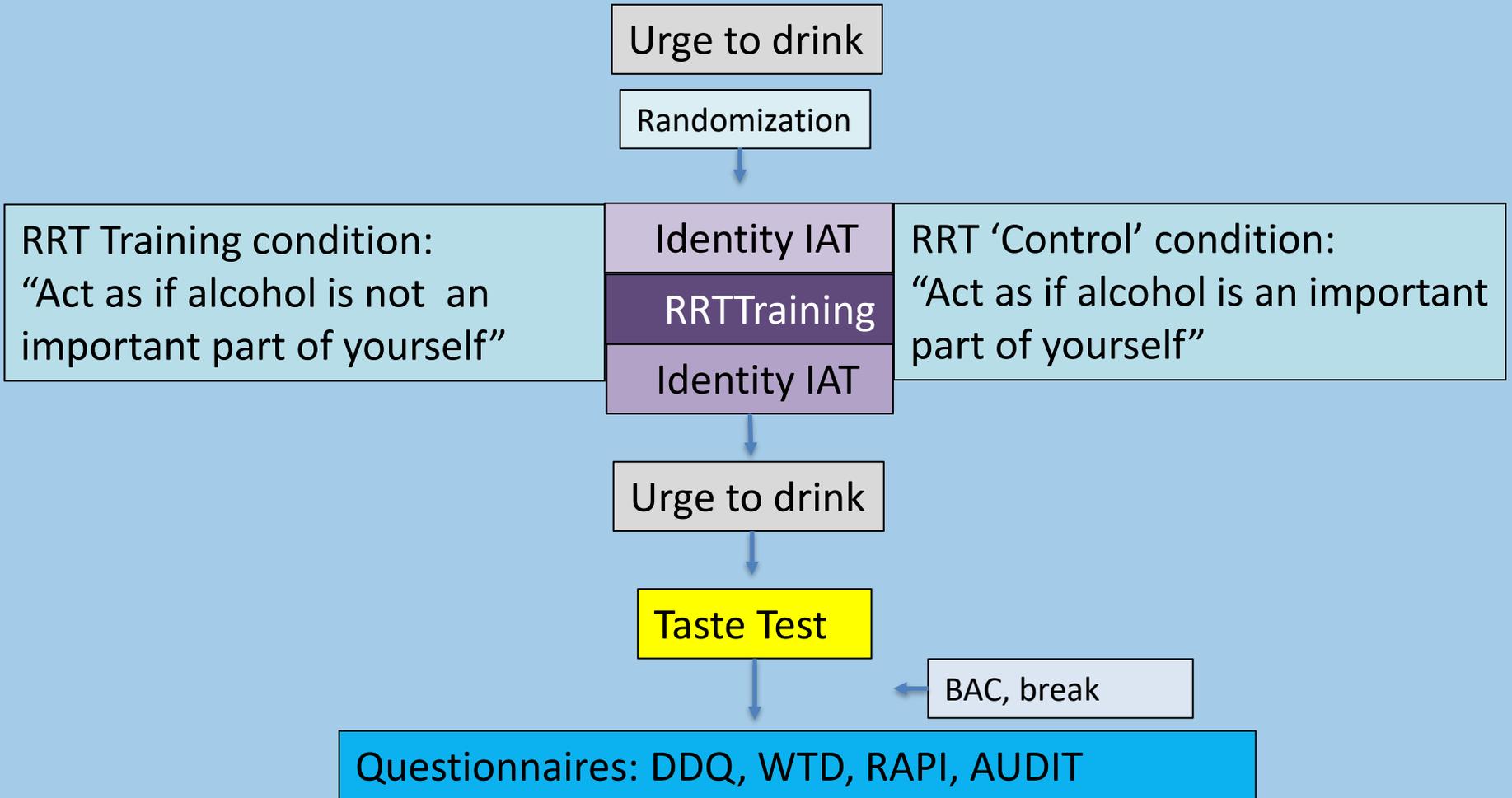
- 1. practice: categorized ten 'true' words (e.g., correct, right, etc.) and ten 'false' words (e.g., wrong, incorrect, etc. Each word was presented twice (40 trials).
- 2. practice: categorized ten drinker and ten non-drinker statements. Each statement was presented twice (40 trials).
- 3. practice: ten 'true' and ten 'false' words as well as ten drinker and ten non-drinker statements served as stimuli (40 trials).

All seven training blocks consisted of a combination of 'true'/'false' words and drinker/non-drinker statements (80 trials).

Outcome Measures

- **Implicit Drinking Identity** (IAT; Greenwald et al., 2003; Lindgren et al., 2013; 2016)
- **Urge to drink** (visual analogue, scale 1-11, soda, alcohol, beer, cola)
- **Alcohol consumption** (ad libitum taste test; Jones et al., 2016)

Procedure and measured constructs



Results

H1. IAT Identity:

'Me+abstainer' = 'Me+drinker'

Repeated Measures ANOVA:

2 (IAT) by 2 (training condition): $F(1, 97) = 1.56, p = .216$

Results

H2. Urge to drink:

'Me+abstainer' = 'Me+drinker'

Repeated Measures ANOVA:

2 (urge) by 2 (training condition): $F(1, 96) = 2.41, p = .124.$

Results

H3. Observed alcohol consumption:

'Me+abstainer' = 'Me+drinker'

Mann-Whitney: $U = 1078.00$, $p = .303$.

Exploratory Analyses

Does IAT identity predict craving and consumption above and beyond RRT training, explicit drinking identity, AUDIT, sex?

Hierarchical regression analyses:

- IAT identity \rightarrow urge to drink ($B = .13; p = .018$)
- IAT identity \rightarrow obs. alcohol consumption ($B = .33; p = .01$)
 - But not in 'abstainer+me' condition ($p = .96$)
 - Did not predict soda ($p > .05$)

Conclusion

Hypotheses were not supported and thus far:

- AAT training: failed
- RRT training: failed
- Student samples, although they drink heavily maybe other (social) factors more important
- Training effects of AAT as add-on in clinical alcohol studies
- Implicit drinking identity still relevant when controlling for other factors

Thank you!



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Drinker identity

	Drinker Identity
Target 1 Category	drinker
Target 1 Word 1	drinker
Target 1 Word 2	alcohol
Target 1 Word 3	aangeschoten
Target 1 Word 4	dronken
Target 2 Category	niet-drinker
Target 2 Word 1	niet-drinker
Target 2 Word 2	frisdrank
Target 2 Word 3	onthouder
Target 2 Word 4	nuchter
Attribute 1 Category	ik
Attribute 1 Word 1	ik
Attribute 1 Word 2	mij
Attribute 1 Word 3	mijn
Attribute 1 Word 4	zelf
Attribute 2 Category	niet ik
Attribute 2 Word 1	niet ik
Attribute 2 Word 2	zij
Attribute 2 Word 3	anderen
Attribute 2 Word 4	hun

Results: Correlations

		AUDIT_total AUDIT	ASCS_total ASCS	DDQ_total DDQ	RAPI_total RAPI	WTD_total	total_beer_consumed 600-Franzikaner- Länderbräu-nonalc beer	age	D_600ep_pre Self+Drinker association all blocks_pre	D_600ep_post Self+Drinker association all blocks_post
AUDIT_total AUDIT	Pearson Correlation	1	.677**	.527**	.768**	.501**	.022	.078	.116	-.013
	Sig. (2-tailed)		.000	.000	.000	.000	.827	.440	.248	.899
	N	100	100	100	100	100	99	100	100	99
ASCS_total ASCS	Pearson Correlation	.677**	1	.467**	.641**	.489**	.140	.079	.183	.002
	Sig. (2-tailed)	.000		.000	.000	.000	.165	.434	.068	.987
	N	100	100	100	100	100	99	100	100	99
DDQ_total DDQ	Pearson Correlation	.527**	.467**	1	.430**	.255*	.023	-.150	.065	-.089
	Sig. (2-tailed)	.000	.000		.000	.011	.820	.136	.521	.383
	N	100	100	100	100	100	99	100	100	99
RAPI_total RAPI	Pearson Correlation	.768**	.641**	.430**	1	.419**	-.013	.169	.024	-.009
	Sig. (2-tailed)	.000	.000	.000		.000	.900	.092	.812	.928
	N	100	100	100	100	100	99	100	100	99
WTD_total	Pearson Correlation	.501**	.489**	.255*	.419**	1	.167	.122	.069	-.003
	Sig. (2-tailed)	.000	.000	.011	.000		.099	.228	.494	.974
	N	100	100	100	100	100	99	100	100	99
total_beer_consumed 600-Franzikaner- Länderbräu-nonalc beer	Pearson Correlation	.022	.140	.023	-.013	.167	1	.147	-.030	.143
	Sig. (2-tailed)	.827	.165	.820	.900	.099		.146	.771	.161
	N	99	99	99	99	99	99	99	99	98
age	Pearson Correlation	.078	.079	-.150	.169	.122	.147	1	-.091	-.170
	Sig. (2-tailed)	.440	.434	.136	.092	.228	.146		.369	.093
	N	100	100	100	100	100	99	100	100	99
D_600ep_pre Self+Drinker association all blocks_pre	Pearson Correlation	.116	.183	.065	.024	.069	-.030	-.091	1	.455**
	Sig. (2-tailed)	.248	.068	.521	.812	.494	.771	.369		.000
	N	100	100	100	100	100	99	100	100	99
D_600ep_post Self+Drinker association all blocks_post	Pearson Correlation	-.013	.002	-.089	-.009	-.003	.143	-.170	.455**	1
	Sig. (2-tailed)	.899	.987	.383	.928	.974	.161	.093	.000	
	N	99	99	99	99	99	98	99	99	99

** . Correlation is significant at the 0.01 level (2-tailed).

Statements as a drinker

- I am a drinker
- Drinking is an important part of my self
- My friends think of me as a drinker
- Without drinking alcohol, I would be a different person
- It is important to me that my friends think of me as someone who drinks alcohol
- Alcohol is part of who I am
- I think of myself as someone who drinks
- I agree when others say that I am a drinker
- I am someone who can't be without alcohol for more than a few days
- When asked to describe myself, one of the first things that pops into my mind is that I like to drink

Statements as a non-drinker

- I am not a drinker
- Drinking is not an important part of my self
- My friends dont think of me as a drinker
- Without drinking alcohol, I would be the same person
- It is important to me that others don't think of me as a drinker
- Alcohol is not part of who I am
- I think of myself as someone who doesn't drink
- I disagree when others say that I am a drinker
- I am someone who can easily be without alcohol for a long time
- When asked to describe myself, I mention a lot of characteristic and habits, but drinking is not amongst them