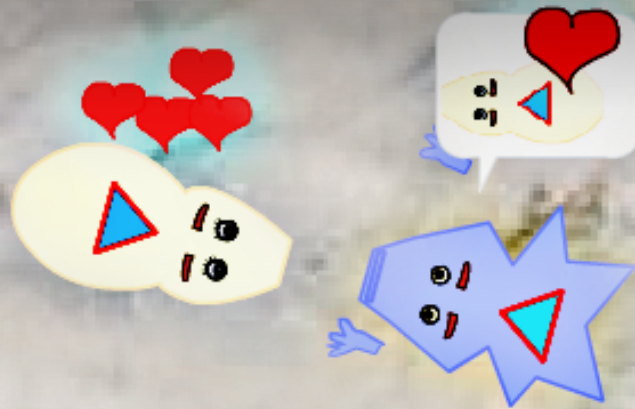


How do you treat your virtual partner?

The assessment of implicit motives with a computer game



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“Mission Statement”

Goal: a **diagnostic computer game** called TIMVE (Test of Implicit Motives in Virtual Environments), that is able to:

- assess the need for intimacy and the need for autonomy in romantic relationships
- at an implicit level
- with satisfying reliability
- and incremental validity compared to self-report measures

Today

- Demo
- Measures
 - idiosyncratic analysis
 - distances
- First Results
 - usability
 - convergent validity
- Future Perspectives

Demo

TIMVE the characters

SIMO (♂) -

**CONTROLLED
BY PLAYER**



THE SPOUSE (♀)



**LISA, THE
ATTRACTIVE NEIGHBOR**



**LEON,
AN OLD ACQUAINTANCE**



- video demo -

measures

actions

2888	inf1_comes	cmd_node	270	Zuneigung...	NA	spouse	m	
2839	inf1_comes	cmd	273	liebevoll streicheln	1	spouse	m	
2839	inf1_comes	IA	2002	stop_interaction	NA	spouse	m	rude
2858	inf1_comes	IA	2001	start_interaction	NA	spouse	m	
2926	inf1_comes	cmd_node	0	main_node	NA	food29		
2933	inf1_comes	IA	2002	stop_interaction	NA	spouse	m	normal
2938	inf1_comes	cmd	801	Essen	NA	food29		
3016	inf1_comes	cmd_node	0	main_node	NA	drink5		
3027	inf1_comes	cmd	802	Trinken	NA	drink5		
3097	inf1_comes	cmd_node	0	main_node	NA	spouse	m	
3117	inf1_comes	cmd_node	230	Romantik etc...	NA	spouse	m	
3140	inf1_comes	cmd	231	romantisch kuessen	1	spouse	m	
3156	inf1_comes	IA	2001	start_interaction	NA	spouse	m	
3242	inf1_comes	IA	2002	stop_interaction	NA	spouse	m	normal
3261	inf1_comes	cmd_node	0	main_node	NA	agent	w	
3295	inf1_comes	cmd	940	Malen	2	agent	w	
3333	inf1_comes	cmd_node	0	main_node	NA	inf1	m	
3375	inf1_comes	cmd_node	250	Auffordern zu...	NA	inf1	m	
3423	spouse_comes_back	cmd	252	'Erzaehl mal wie es Dir geht!'	1	inf1	m	
3440	spouse_comes_back	IA	2001	start_interaction	NA	inf1	m	
3441	spouse_comes_back	IA	2002	stop_interaction	NA	inf1	m	normal
3509	spouse_comes_back	cmd_node	0	main_node	NA	inf1	m	
3544	spouse_comes_back	cmd_node	270	Zuneigung...	NA	inf1	m	
3568	spouse_comes_back	cmd	271	Kompliment machen	1	inf1	m	
3584	spouse_comes_back	IA	2001	start_interaction	NA	inf1	m	
3616	spouse_comes_back	cmd_node	0	main_node	NA	spouse	m	
3641	spouse_comes_back	cmd_node	280	von Traeumen erzaehlen...	NA	spouse	m	
3661	spouse_comes_back	cmd	285	Seelenverwandten treffen	1	spouse	m	
3661	spouse_comes_back	IA	2002	stop_interaction	NA	inf1	m	rude
3690	spouse_comes_back	IA	2001	start_interaction	NA	spouse	m	
3758	spouse_comes_back	cmd_node	0	main_node	NA	drink5		
3772	spouse_comes_back	cmd	802	Trinken	NA	drink5		
3772	spouse_comes_back	IA	2002	stop_interaction	NA	spouse	m	rude
3883	spouse_comes_back	cmd_node	0	main_node	NA	inf1	m	
3915	spouse_comes_back	cmd_node	260	Aergern...	NA	inf1	m	
3940	spouse_comes_back	cmd	264	kritisieren	1	inf1	m	
3968	spouse_comes_back	IA	2001	start_interaction	NA	inf1	m	
4039	spouse_comes_back	cmd_node	0	main_node	NA	food25		
4051	spouse_comes_back	cmd	801	Essen	NA	food25		
4137	spouse_comes_back	cmd_node	0	main_node	NA	agent	w	
4150	spouse_comes_back	cmd	910	Schlafen	NA	agent	w	

+

-

idiographic analysis

Event

Action

possible affair appears („Lisa“),
spouse goes away

say hello to Lisa

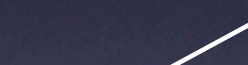
pay Lisa a compliment

try to kiss Lisa

spouse comes back

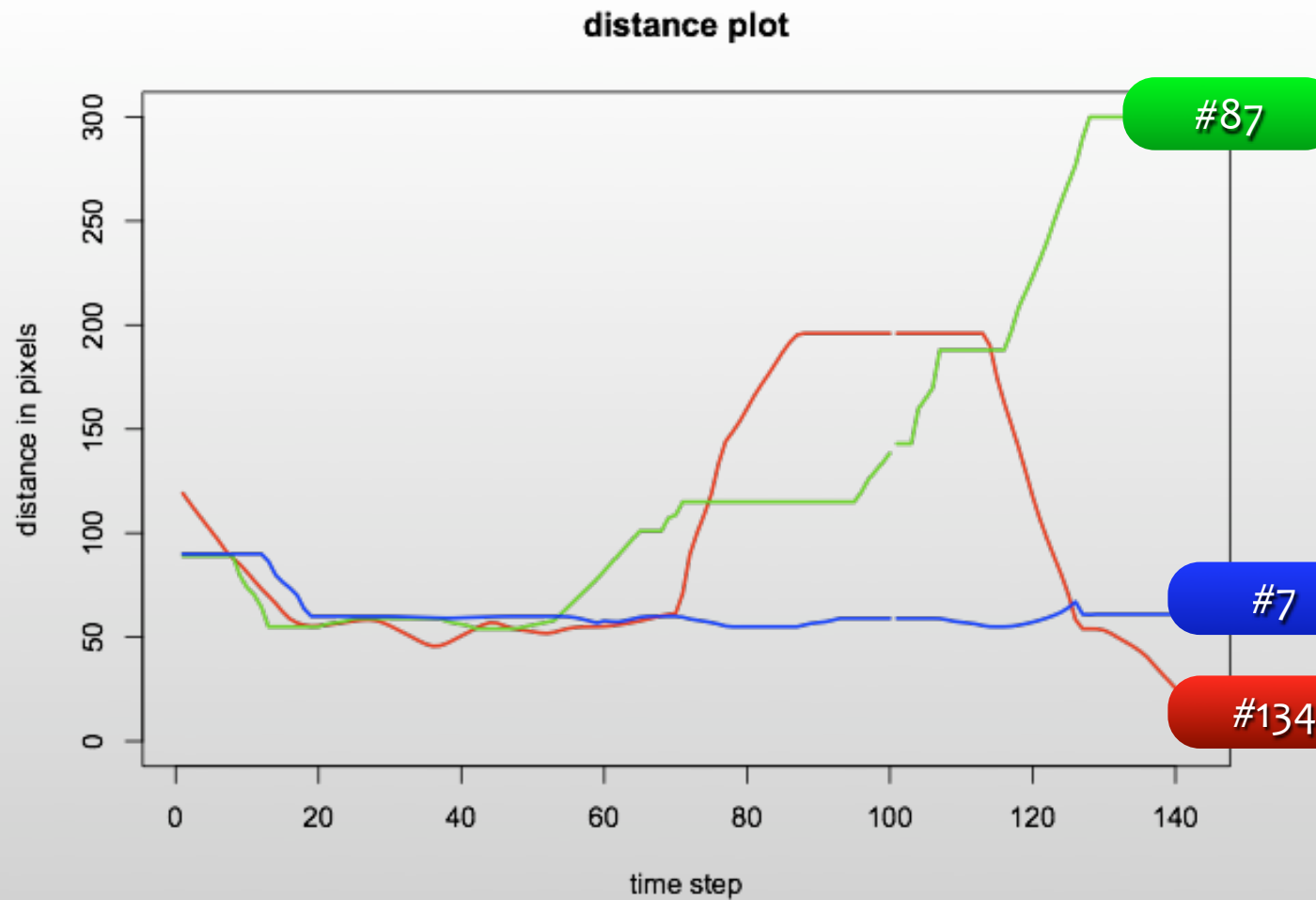
send away Lisa

say to spouse:
„I love you!“



distances

scene: „spouse comes the first time“



first results

- explorative & preliminary -

Usability

Setup & Duration

Administration	Tutorial / Training	Game
Internet, compatibel with all browsers and OS	3-6 min.	15 min.

„The handling of the game was easy“ (n = 267)



- *strongly disagree*
- *rather disagree*

- *undecided*

- *strongly agree*
- *rather agree*

Instigation

„Did you experience a ‚special‘, emotional moment?“

„The anger I developed when my partner was courted by the other was staggering. I feared I could lose her!“

„When Lisa started to flirt with my husband, I really got jealous. I tried to distract her, so that she stopped flirting.“

„When my partner showed deeper feelings to the newcomer, it really shocked me. But I tried to convince him that *I* am the best for him!“

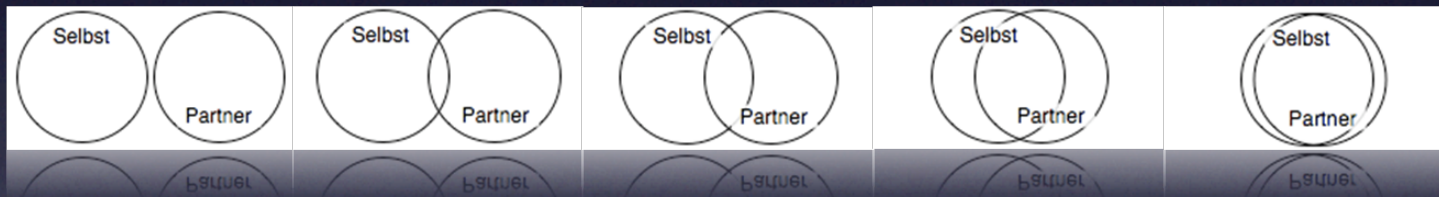
„...the joint dancing and the resulting intimacy...“

... about 60% reported a such an emotional moment

Convergent Validity

Self-report measures:

- 8-item scales for intimacy and autonomy ¹
- Inclusion of Other in the Self (IOS) ²



- adult attachment styles (RQ) ³
- relationship satisfaction (1 item)

¹ Asendorpf et al. (in prep.)

² Aron, Aron, & Smollan, 1992

³ Bartholomew & Horowitz, 1991

Results

n = 75; bivariate correlations are shown	Rel. satisfaction	IOS	INT	AUT	Attachment Styles			
					Sec	Anx	Pre	Dis
Distance: alone with spouse		-.17		-.15		-.31		
Distance: rival appears		-.36						.16
Positive beh. towards spouse	.22	.34	.28	-.15	.22			-.18
Negative beh. towards spouse	-.19	-.33	-.24					.36
Bipolar index (neg .. pos)	.29	.42	.32	-.19	.20			-.23
Preference for affair	-.40	-.48	-.42	.33	-.27			.40

All rs > .20 are significant with $p < .05$

limitations so far

- some overemphasis on jealousy and fidelity
- no data for the implicit domain
- no to low internal consistencies

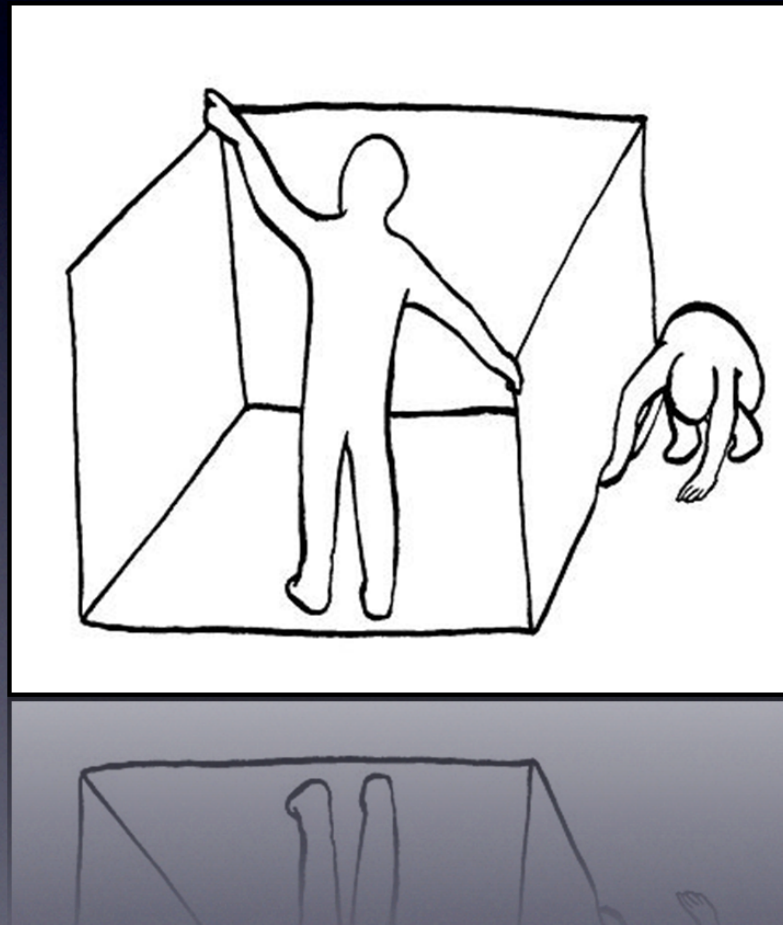
internal consistencies

items	coefficient (n=75)
positive behavior towards spouse (consistency between scenes)	$\alpha = .29$
distances (consistency between scenes)	$\alpha = .06$
distances (split half within scenes)	average $r_{tt} = .40$

future perspectives

Future perspectives

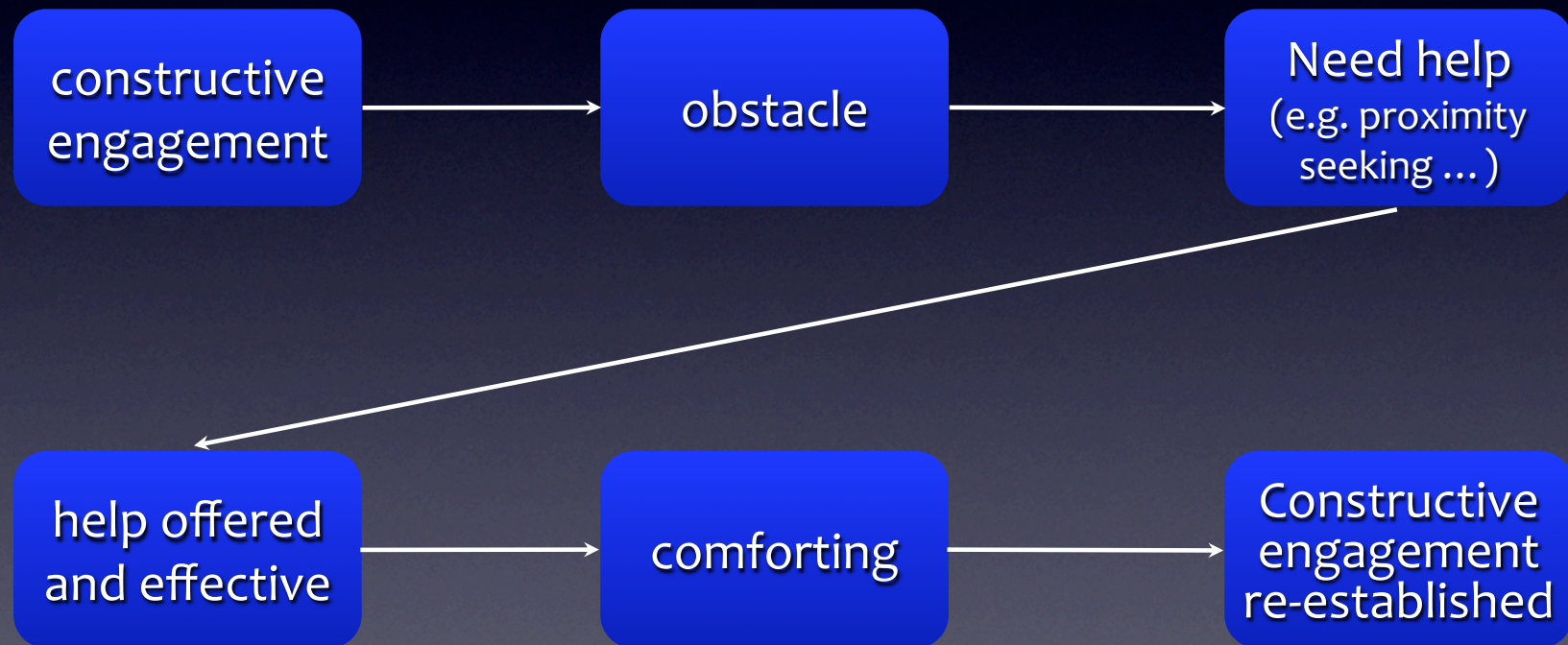
Validation with TAT-like measure for intimacy and autonomy ¹



¹ Hagemeyer, 2008

Future perspectives

The „secure base script“ ¹



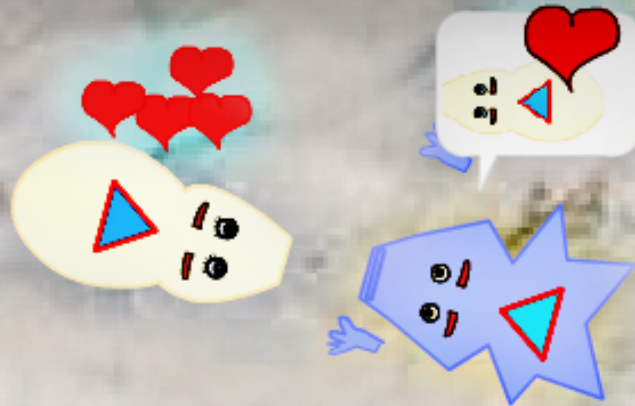
¹ Water & Waters, 2006

Conclusion

- We have an easy-to-use online game
- TIMVE taps both into the explicit and implicit domain
- The game has something to do with attachment and intimacy
- Many issues are unclear ...
- ... the preliminary results are encouraging to continue research !

Thanks for your attention!

Any questions?



Try the game at
www.nicebread.de

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