A methodology for implementing and evaluating *fun* experiences in the treatment of Social Anxiety Disorders.

Using Videos, Vikings and Teddy-bears to Reduce Anxiety

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Intuitive Fun

- *systematic desensitization* – pairing fear with an incompatible response i.e. *fun*.

- *Separation Anxiety Disorder* – parents are praised for using imaginative "play talk" that promotes *fun*.

- Social Anxiety Disorder – nothing is *fun* anymore.

Fun as treatment

- Tripartite Model and Dimensions of Anxiety and Depression (Chorpita 2002)
- puppets, dramatherapy and roleplay in
  - counselling in bereavement
  - eliciting evidence in abuse cases
  - alleviating anxieties prior to medical procedures
  - emotional disturbances
  - mental health issues
  - health education projects

Measuring and Describing Fun

- The Fun Unification Model
  - individual predisposition (Am I *fun*?)
  - action in an environment (Is this *fun*?)
  - and response to stimuli (Did I have *fun*?)

- human tendency to 'have *fun*' finding and creating narrative

Fun Unification Model
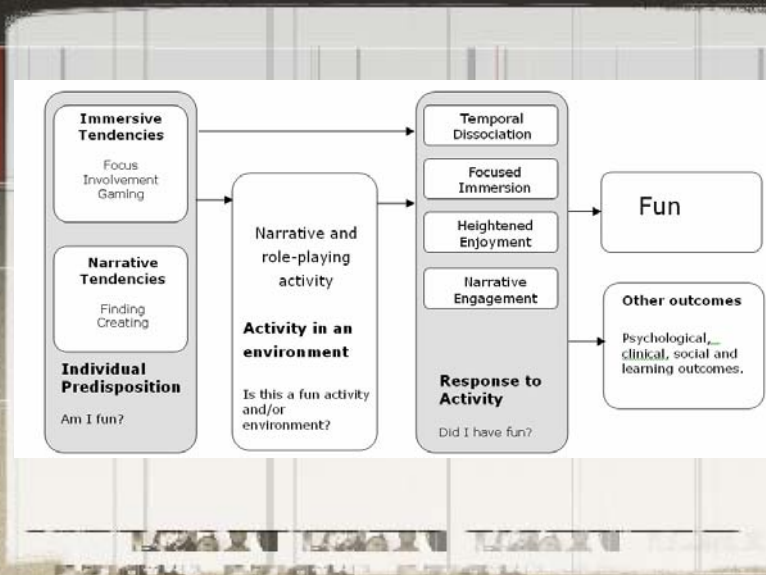
Albert in Africa Experiments

- Text based environment
- Avatar based environment
- Video based environment

The Activity

- Pre-disposition questionnaire
- 5 minute AV intro to Albert
- 20minute One on one communication with Albert in one of three environments
- Response questionnaire

- 60 subjects - 20 in each environment

Predisposition Data

Age	Gender	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
50	MALE	7	6	6	6	6	5	5	4	5	5	5	3	4	4	4	4
19	MALE	4	5	3	4	5	4	5	3	4	4	4	4	5	3	4	3
19	MALE	6	6	4	4	6	4	6	3	5	6	4	2	4	5	5	3
20	MALE	6	6	6	4	6	6	4	2	7	6	6	1	1	5	5	1
18	FEMALE	7	7	7	7	7	7	4	3	5	6	5	1	1	7	7	2
27	MALE	5	2	2	5	5	6	1	1	5	5	4	5	2	6	6	2
22	MALE	6	5	6	5	7	6	4	2	2	6	6	2	6	3	1	6
19	FEMALE	5	6	6	4	6	6	5	2	7	6	6	2	2	5	6	1

Comparison of Environments

Comparison of responses using one-way anova.

	Mean Exp1	Mean Exp2	Mean Exp3	F	p
Temporal Dissociation:	5.8	5.5	4.7	5.84	0.005
Focus:	4.9	4.9	4.9	0.005	0.99
Heightened Enjoyment:	5.6	5.8	5.7	0.24	0.78
Narrative Engagement/Play:	5.0	4.9	4.8	0.22	0.80
Fun:	5.3	5.3	5.0	1.10	0.35
Intention to Revisit:	4.6	4.8	4.4	0.52	0.60

Correlations of the FUn Model

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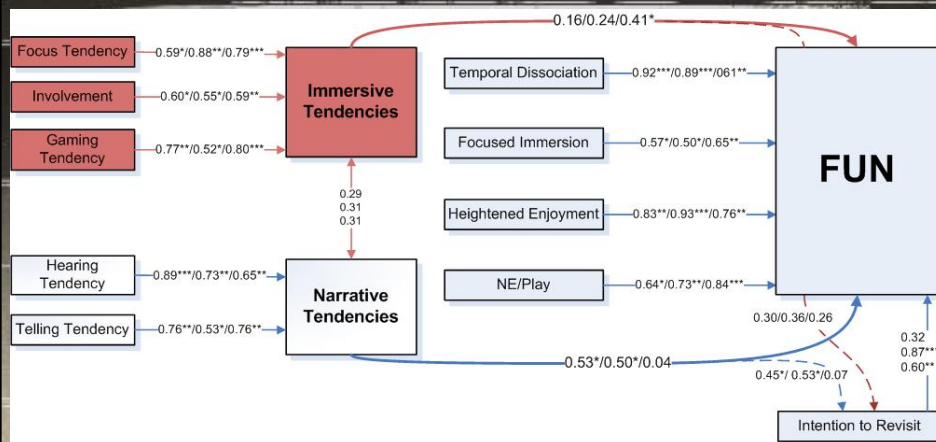
Observed Behaviour and *Fun*

- Levels of acceptance of Narrative elements
- Behaviour related to communication environment
  - Avatar and AI assumption
  - Avatar and sense of social presence
  - Video and increased level of trust

Acceptance of Narrative

Kati: ello al bear Albert: ello kati!	All sessions began with a standard greeting.
Albert: thats a nice name you have! kati: are you a real bear?? kati: thankyou Albert: i am indeed. 100% teddy bear Albert: and are you a real human? …	Kati's first response may seem on the surface to be a block but the way she is asking leaves open a possibility that Albert is indeed a teddy.
kati: who were all the people talking to you in the slide show? kati: yes..i think so.. Albert: oh you know...everybody...its hard being so popular Albert: hehe kati: hehe kati: this is *Fun*ny …	Kati very quickly accepts that Albert was in Algeria talking to various people. Her comment, "this is *Fun*ny", along with her body language and focus seemed to express a high level of *Fun*.
kati: and we can talk again one day Albert: for sure!	Kati's last communication with Albert communicates a wish to talk again.

Findings of Experiments

- Activity was fun for most subjects
- Individual predisposition had some predictive potential
- The communication environment had less measurable effect on overall fun than expected.

Fun and Anxiety

- FUn Model for measuring *fun*

- Use of narrative and role-playing with teddy-bear avatar is inherently playful.
- Albert stories/interactions tick a lot of boxes in makinging a fun experience from typical SAD fears;
  - Fear of strange places
  - Fear of peer evaluation
  - Fear of talking to others
  - Fear of poor performance

Fun Activity Conclusions

- Never the whole therapeutic medium
- Potential of activity of promote fun
- Effectiveness dependent on the skill of the practitioner
- Fun Model potential for measuring efficacy of treatment activities

Future Directions

- Introduce monitoring of anxiety levels
- Introduce *video comment*
- Refine data collection, survey statements
- Introduce biometric measures

- Fun treatment of SAD
  - Albert in the Land of the Vikings
  - Albert and the Goths

Thanks for Listening!

- We are …
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  And one last shameless promotion … coming soon …
  ## Albert and the Goths!