

**Measuring Game Exposure Attitude Change
among Children and Young People
(Work Package 04)**

NONE
in
3

Preventing Domestic Violence

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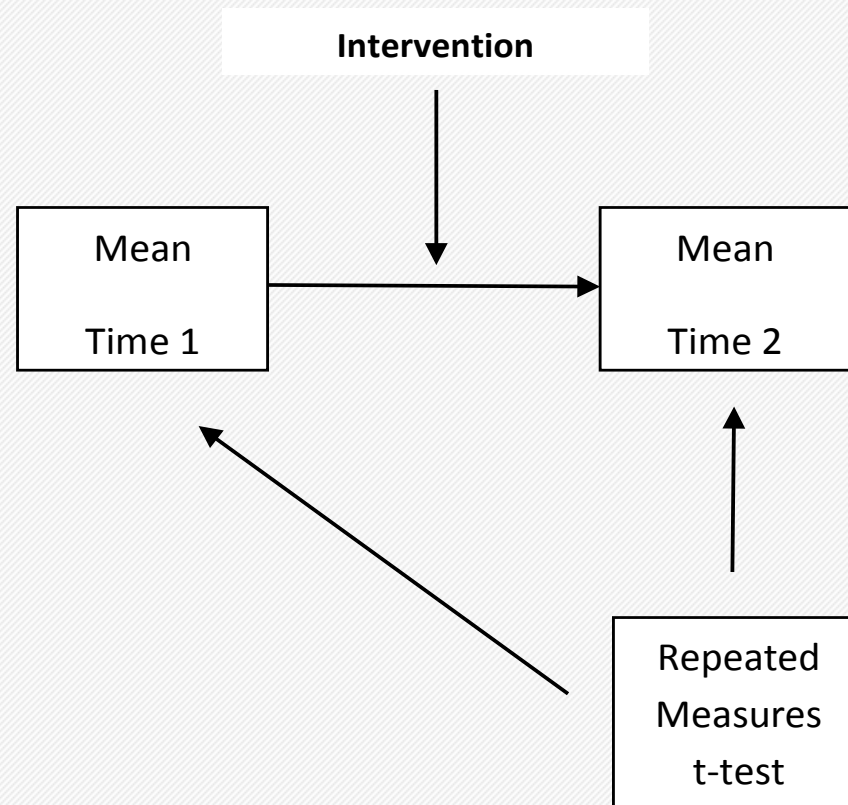
Outline

- Study design (quantitative)
- Aims
- Sampling
- Survey procedure
- Proposed analyses



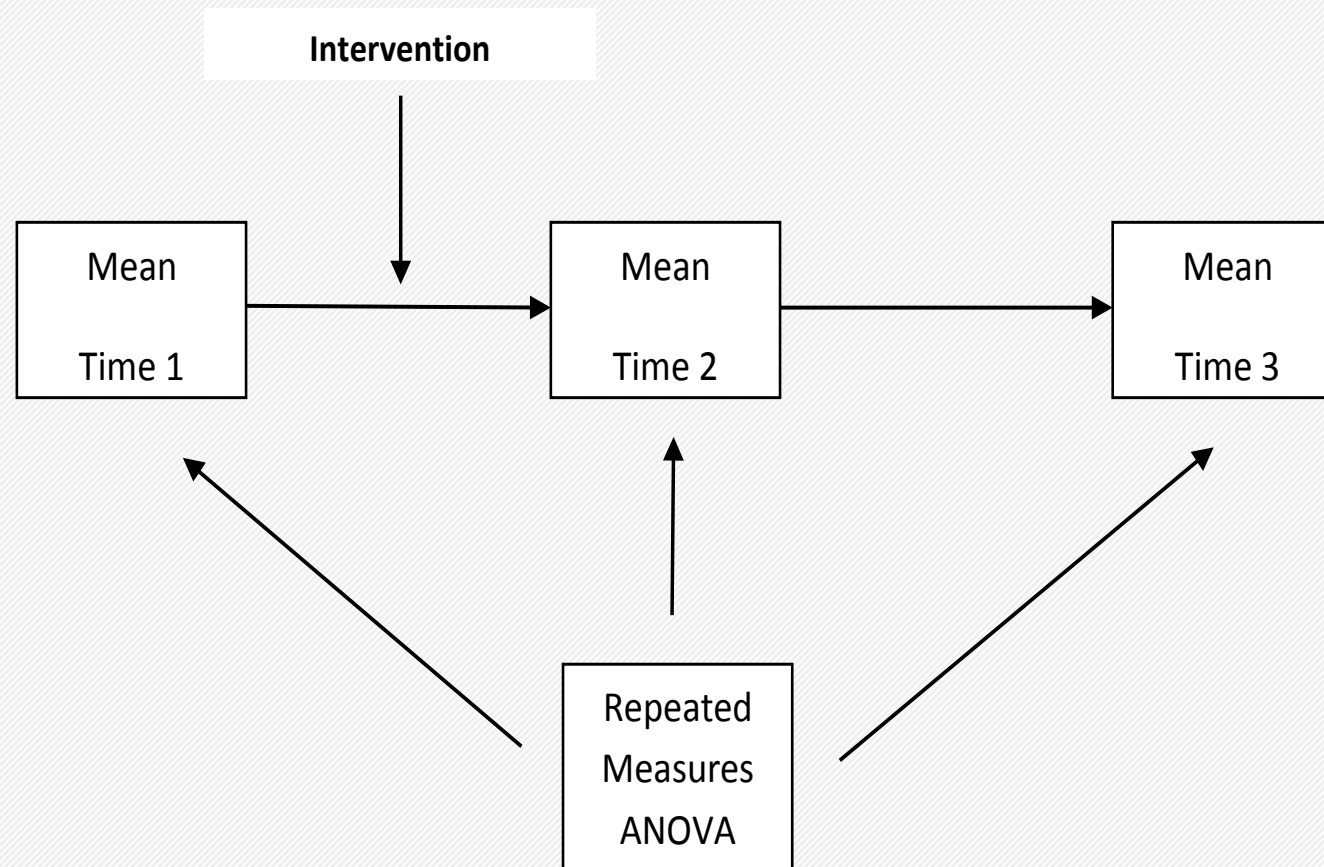
Study Design (Quantitative)

- Prospective design
- Mixed within (pre/post-game exposure) and between (control/experimental group)



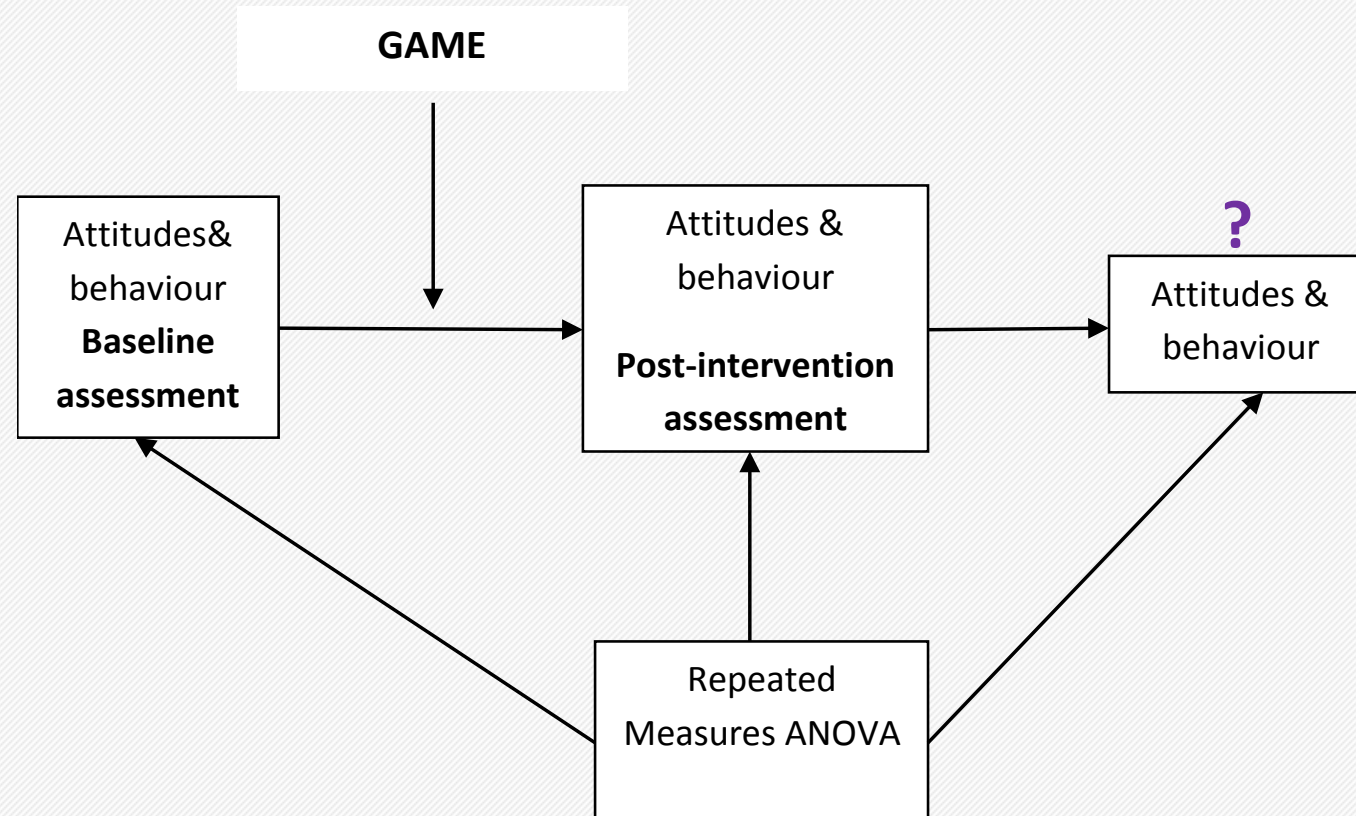
Study Design (Quantitative)

- Longitudinal study (ideally!!!)
- Why?
- We want to make sure that the intervention is effective over time



Our Aim

- To test the effectiveness of serious gaming for attitude/behaviour change among children and young people
- Mixed within (pre/post-game exposure) and between (control/experimental group)



Population (Sampling)

The study sample will be stratified by:

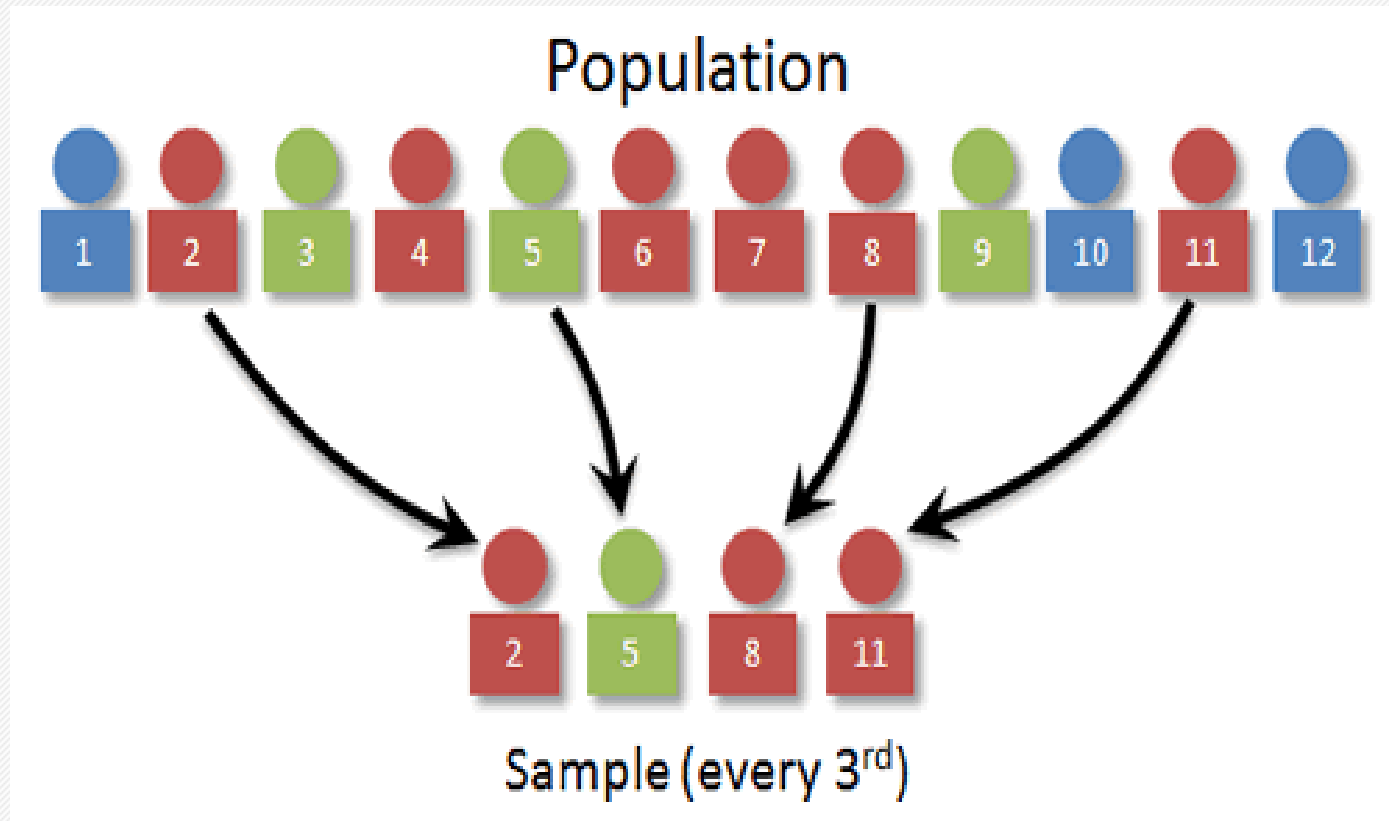
- Country
 - Barbados
 - Grenada
- School level
 - Primary
 - Secondary
 - College/University
 - Adolescents identified as at risk of violence through probation services
- Gender

Total minimum sample required for this project

- Barbados = 744
- Grenada = 735

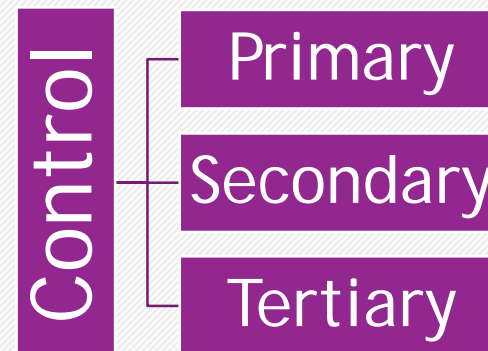
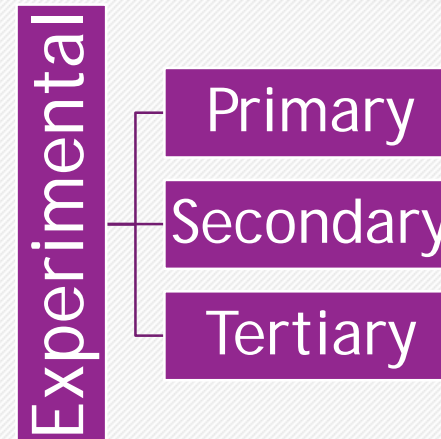
Study procedure

- Primary x 2, secondary x 2, and tertiary schools x 2 will be systematically selected for participation in the study from each country.
- Also probation service



Study procedure

- Schools from all levels of education will be randomly assigned to
 - experimental (game exposure)
 - and control group



Study procedure

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- Students will be systematically selected within participating schools. Survey will be administered to all participants in order to assess attitudes and behaviours related to violence and empathy.
- AIM – to create a psychosocial profile
- Method of administration (???)
 - Printed survey
 - Online version (Qualtrics)



Study procedure

- Students in the experimental group will be exposed to a serious gaming intervention which facilitates attitude/behaviour change and builds empathy capacity and non-adversarial conflict resolution skills.
- Students in the control group will not be exposed to any intervention except what is already included in the school curriculum.
- The same survey will be administered to both experimental and control groups in order to observe the change in attitudes/behaviours after being exposed to the gaming intervention (or not). This part will evaluate the effectiveness of the gaming intervention.

Survey methods – constructs to be measured (We are in the process of developing the survey)

- Attitudes towards women in the adolescence
 - power dimension
 - equality dimension
 - and behavioural dimension
- Violence attitudes and behaviour
 - victim blame
 - entitlement
 - DV-SV as trivial/deviant behaviour
- Empathy (PPTS, Boduszek et al., 2016)
 - cognitive & affective factors, egocentric perspective, and callous affect.
- Impulsivity and sensation-seeking

Survey methods – established constructs we consider at the moment

- The presence or absence of violence (psychological, physical, and sexual)
- Severity of Violence Against Women Scale (Behavioural scale)
- Attitudes Towards Violence for Adolescents
- Attitudes towards gender roles and relations
- International Violence against Women Survey (IVAWS)
- The Dominance Scale
- Propensity for Abusiveness Scale
- Adolescent social norms regarding violence and gender
- Normative Beliefs about Aggression
- Attitudes Toward Interpersonal Peer Violence
- Multi-Dimensional Emotional Empathy Scale
- Psychopathic Personality Traits Scale (Boduszek et al., 2016)
- Conflict Resolution Questionnaire
- Conflict Resolution - Conflict Tactics Scale (CTS)
- Conflict in Adolescent Dating Relationships
- Skills for Violence-Free Relationships
- Bystander Attitudes and Behaviours

Survey methods – Content Validity and Cognitive Testing & Pilot Test of the Survey

- The proposed survey will be submitted to research team for comments.
- Then, administered to respondents representing the likely target population.
- This step has two purposes:
 - First, it can reveal problems with the survey via respondent feedback or observation.
 - The most common problems respondents have with questions are related to comprehension.
 - Problems about how easy they find it to retrieve the relevant information they need to answer questions from memory,
 - their ability and willingness to provide the information in the required format
 - Second, this step produces data for the next step of the survey construction—evaluation of the item pool’s psychometric properties and quality.

Survey methods – Psychometric Analysis

- The proposed concepts within the survey will be subject to construct validity and dimensionality testing using traditional factor analytic techniques along with innovative bi-factorial modelling and MTMM analysis.
- Further analysis will aim to investigate the discriminant and predictive validity of the proposed scales. Additionally, the composite reliability of the scales will be assessed.



Survey methods – Data Entry, Data Management and Data Analysis

- Collected data will be entered into SPSS 22
 - Nicole
 - Dominic
- Data merging, cleaning and analysis will be conducted by
 - Dan
 - Nicole
 - Dominic.
- To investigate the effectiveness of gaming intervention, we will use a series of repeated measures ANOVAs, structural equation modelling with longitudinal data, latent profile analysis, and propensity score matching technique.
 - Dan (advanced analysis, training for Nicole and Dominic, and final draft of the quantitative report)
 - Nicole and Dominic (basic analysis and the first draft of the quantitative report)

Proposed Data Analysis 1

- Validation of measures adopted to our study
- CFA, Bifactor CFA, MTMM

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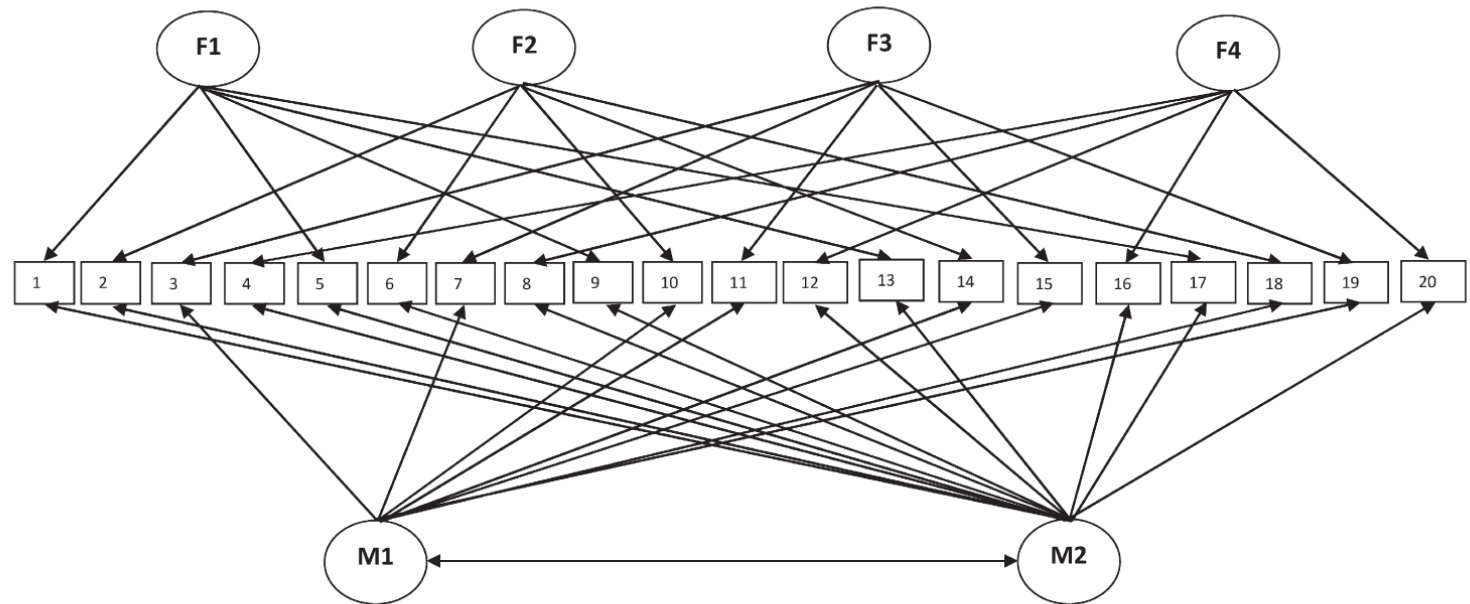
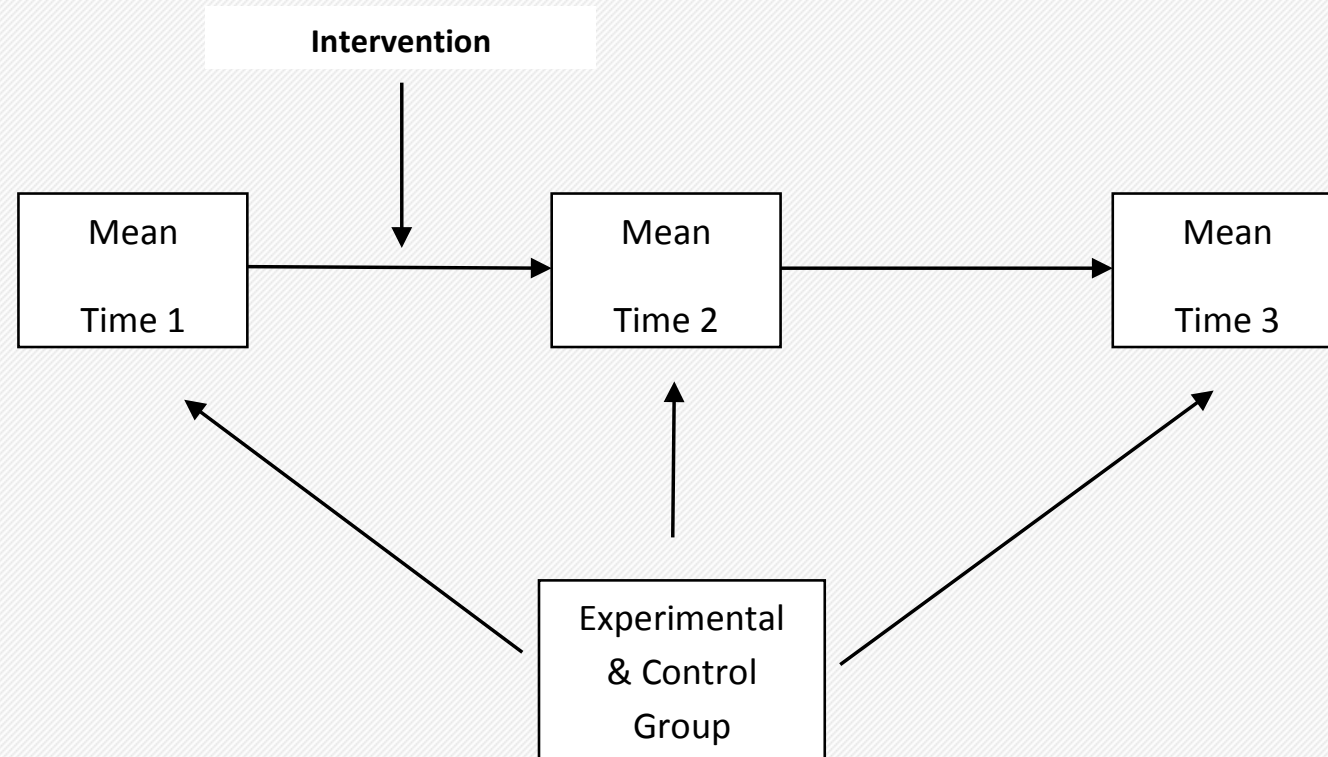


Fig. 1. MTMM model of the PPTS. F1 = affective responsiveness, F2 = cognitive responsiveness, F3 = interpersonal manipulation, F4 = egocentricity, M1 = knowledge/skills, and M2 = attitudes/beliefs.

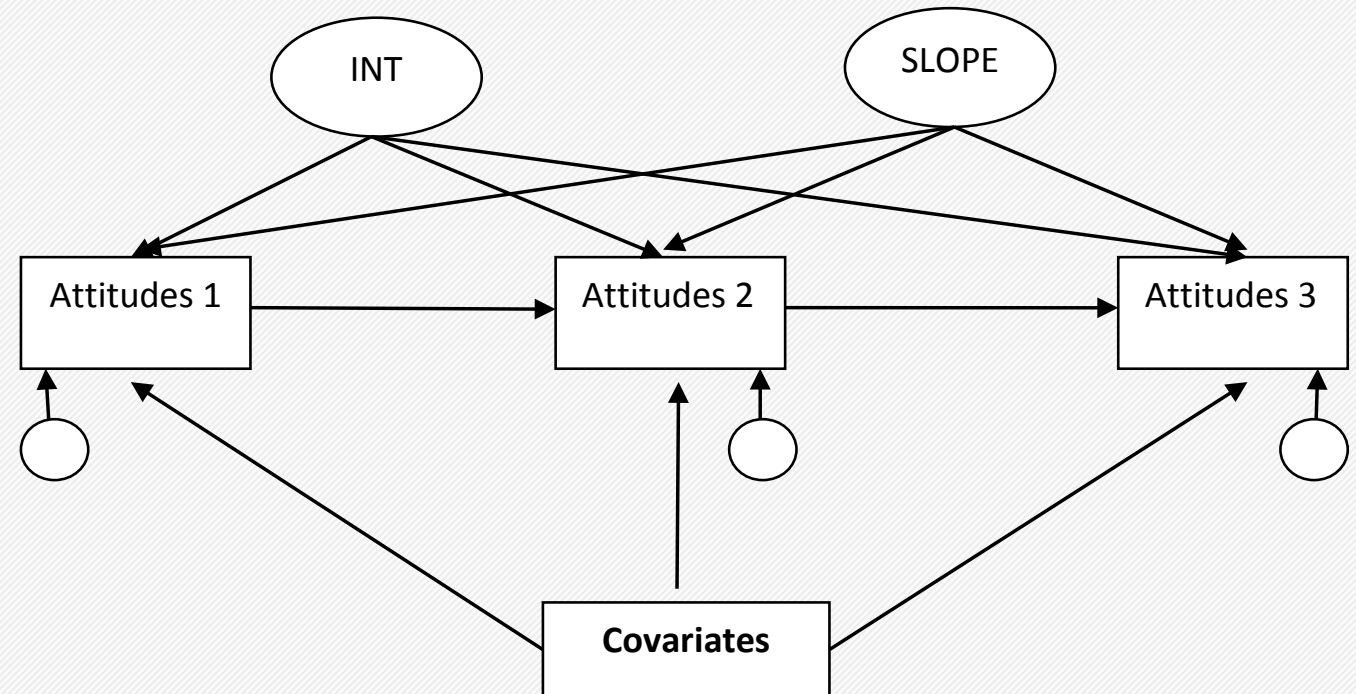
Proposed Data Analysis 2

- Change in attitudes/behaviour over time
- Mixed between-within ANOVA



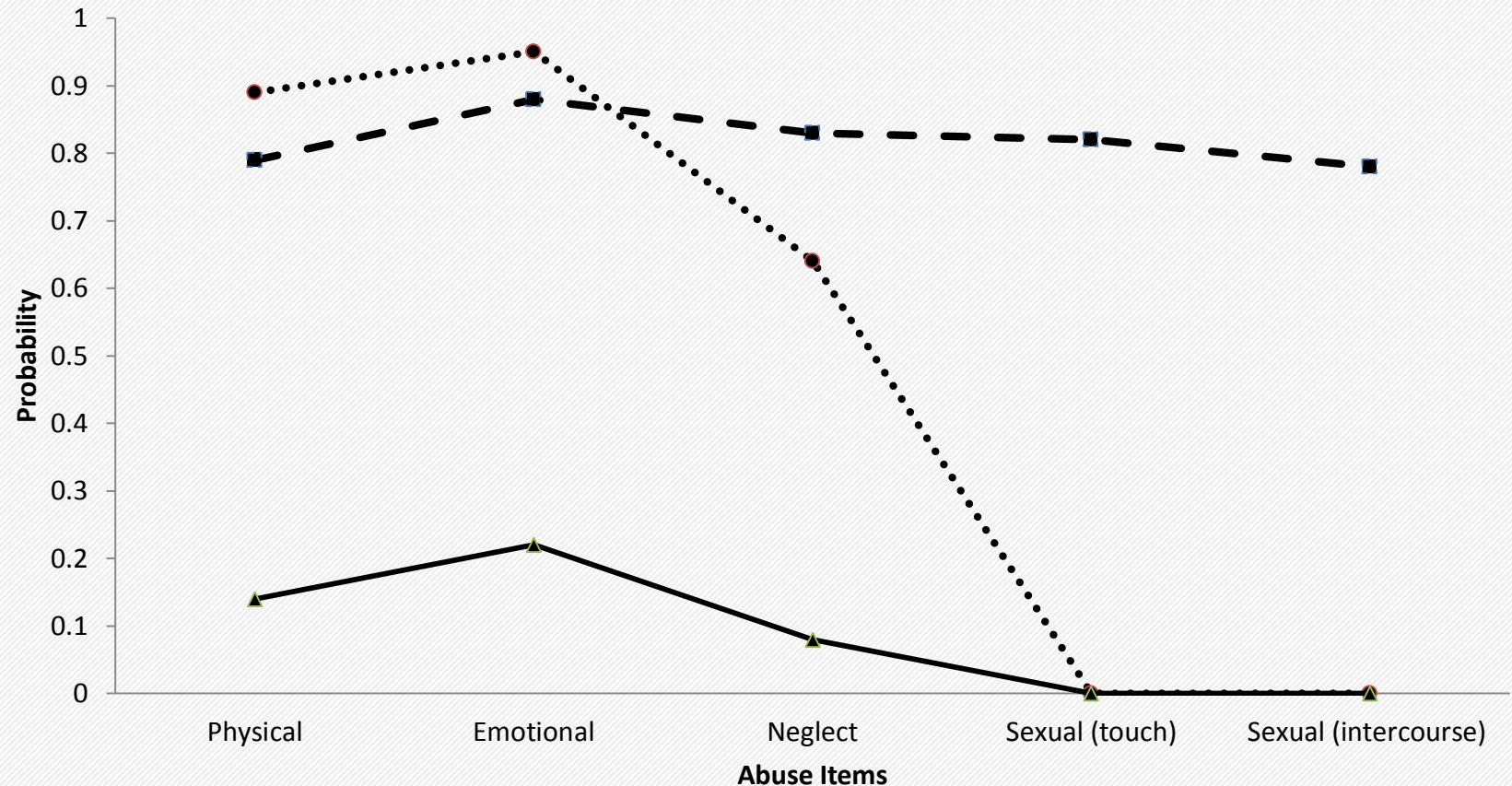
Proposed Data Analysis 3

- Change in attitudes/behaviour over time while controlling for covariates (and error measurement)
- Latent Growth Modelling



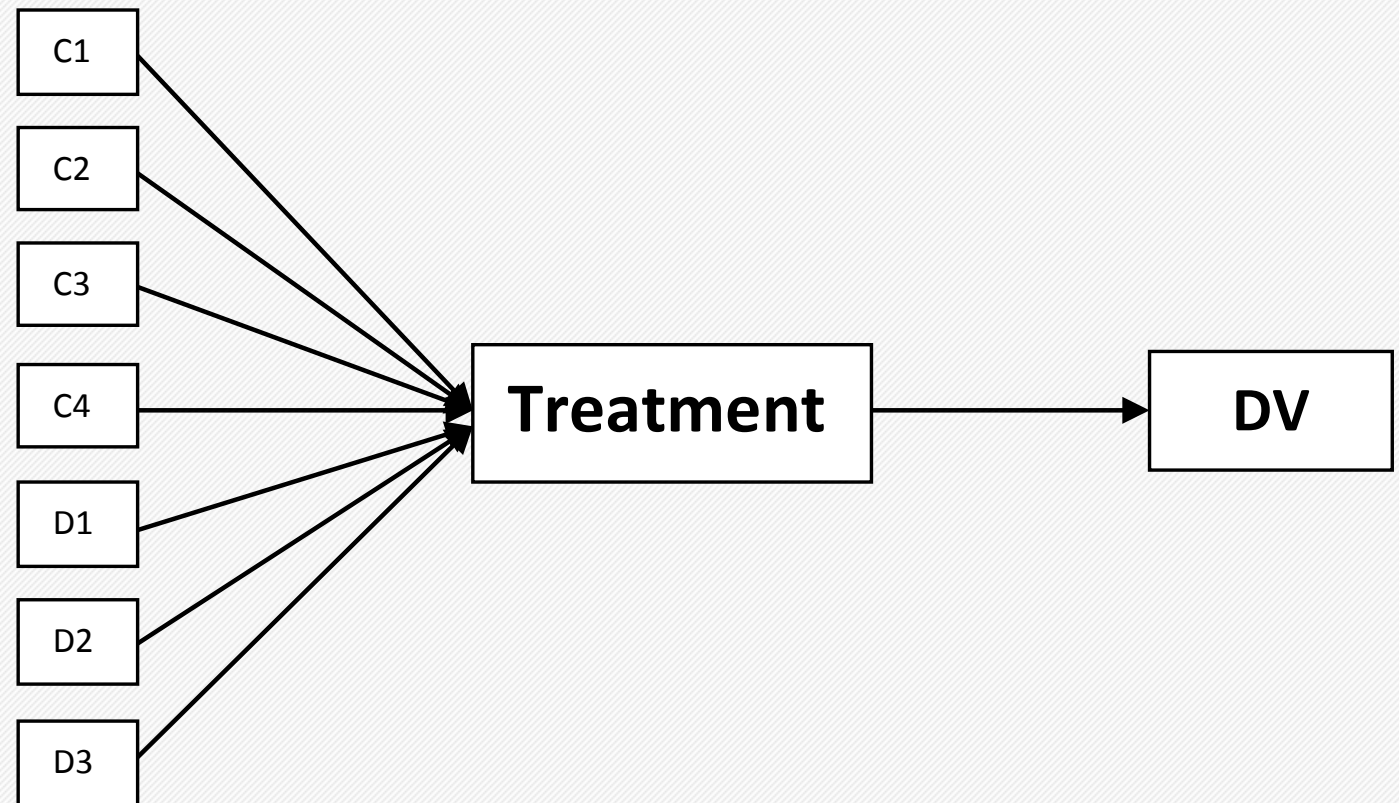
Proposed Data Analysis 4

- Change in psychosocial profile (attitudes and behaviour)
 - Assessment before & and after game intervention)
- Latent profile analysis
- Figure on right – example of my prison research



Proposed Data Analysis 5

- The effect of treatment (game) on attitudes/behaviour (DV)
 - Subjects in exposure group vs. non-exposure group may be very different in baseline characteristics (C1-4 and D1-3).
- We will use propensity score (a single number) to match subjects in each group (experimental & control) based on observed covariates
- Propensity score matching analysis



Thank you!!!

Questions?
Comments?

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