Mate-Tricks Afterschool Programme RCT Evaluation: Secondary Analysis of Archived Data

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Introduction

• After-school programme in a community of significant disadvantage/high poverty in Dublin, Ireland
• Programme aimed at promoting pro-social behaviour and improving parenting
• RCT Evaluation showed negative effects
• Secondary Data Analysis Project (Path Analyses)
The Mate-Tricks Programme

• A one year pro-social behaviour after-school programme
• Area of significant disadvantage in Dublin, Ireland
• 59 child only, 6 parent only (13%) and 3 family sessions (4%)
• Combination of Strengthening Families and Coping Power Programs
  – Widely studied in US & Europe
Original RCT Study Methods

• RCT of 592 children
• Outcome evaluation
• Process Evaluation (Qualitative)
• Implementation Evaluation (Quantitative)
• Analysis
  – Main effects, Exploratory analysis, Process evaluation
Outcome Measures

- **2 primary outcomes**
  - Pro-social behaviour and Anti-social behaviour
  - measured 5 ways (360°) by CBCL & PSBQ
- **11 secondary outcomes**
  - School attendance, ADHD Behaviours, Victimisation, Conflict, Social engagement, Trait Emotional Intelligence
  - Parental relationships:
    - Liberal parenting,
    - Supportive parenting,
    - Authoritarian parenting,
    - Relationship with Mum
    - Relationship with Dad
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    - Relationship with Mum
    - Relationship with Dad
Implementation Measures

- Parental Attendance (Dosage)
- Child Attendance (Dosage)
- Child Enjoyment
- Class Behaviour
- Child Teacher Relationships
Implementation Measures

- Parental Attendance (Dosage)
- Child Attendance (Dosage)
- Child Enjoyment
- Class Behaviour
- Child Teacher Relationships
Original RCT Effects

Four **significant** adverse effects from child self-report

- Primary Outcomes
  - Anti-social behavior (PSB Questionnaire) ES = .18
  - Anti-social behavior (CBCL Questionnaire) ES = .20

- Secondary Outcomes
  - Authoritarian Parenting (APQ) ES = .20
  - Liberal parenting (APQ) ES = .16

- No significant positive effects
Original Implementation Findings

- MT was influenced by a range of factors
  - Cohort, SEN, Children attendance, Parent attendance, Child satisfaction
  - Overall *low* parent attendance was the most significant predictor of outcomes

- Program satisfaction moderated effects
  - Satisfaction with programme moderated pro-social behaviour
  - Relationship with facilitator moderated anti-social behaviour
Process evaluation findings

• The views and observations *Mate-Tricks* very positive. In contrast with main programme effects?
• Engaged parents and their children took part therefore they were more favourable towards the programme
• These findings might suggest that Mate-Tricks worked successfully for engaged families
• A program for these families alone would not meet the original aims based on community need
Impact

- Four statistically significant negative effects; so delivery was discontinued
- Ethical responsibility to help deal with fallout
  - A lot of follow up work with the community, parents, providers etc.
- Overall capacity built in the community understanding research, evaluation and program delivery
Original theories on what went wrong?

• Implementation Issues:
  • Engagement - difficulties engaging parents

• Theory issues:
  • Cooperative learning
  • Potentially driven by setting up competitive goal structures rather than cooperative goal structures
  • Look at the pattern of effects i.e., parenting and behaviour. Parents ‘Giving up’ (liberal) or ‘Cracking down’ (authoritarian) children ‘Acting out’ (anti-social)

Explore this in more depth through Path Analysis
Replication of RCT results

\[ \chi^2 (1, n=592) = 1.82, \ p=.177; \ \text{RMSEA} = .04; \ \text{CFI} = .98; \ \text{TLI} = .90 \]
Replication of RCT results

\[ \chi^2 (1, n=592) = 1.82, \ p = .177; \ \text{RMSEA} = .04; \ \text{CFI} = .98; \ \text{TLI} = .90 \]
Intervention group, parenting and behaviour

\[ \chi^2 (1, n=304) = 14.40, p<.001; \text{RMSEA} = .21; \text{CFI} = .69; \text{TLI} = .83 \]
Intervention group, parenting and behaviour

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Intervention group - dosage added in

\[ \chi^2 (1, n=304) = .69, p=.406; \text{RMSEA} \approx .00; \text{CFI} \approx .99; \text{TLI} = 1.06 \]
Intervention group - dosage added in

\[ \chi^2 (1, n=304) = .69, p=.406; \text{RMSEA} \approx .00; \text{CFI} \approx .99; \text{TLI} = 1.06 \]
Intervention group - supportive parenting added in

\[ \chi^2 (1, n=304) \approx .0, p=.997; \text{RMSEA} \approx .00; \text{CFI} \approx .99; \text{TLI} = 1.21 \]
Intervention group

- Liberal parenting gains: $\beta = -0.12; p = 0.108$
- Authoritarian Parenting gains: $\beta = 0.25; p = 0.001$
- Supportive Parenting gains: $\beta = -0.01; p = 0.908$
- Antisocial Behaviour gains: $\beta = -0.17; p = 0.021$

$\chi^2 (1, n=304) = 0.78, p = 0.378; \text{RMSEA} \approx 0.00; \text{CFI} \approx 0.99; \text{TLI} = 1.07$
Lessons

Afterschool Behaviour Programmes handle with care!

- Intervention has implications for parenting styles and resultant behaviour
- Need sufficient parental sessions and engagement
- Care not to disrupt close relationships (highly entitative groups)
- Ensure set up of ‘Social learning cooperation’ rather than ‘Social learning competitiveness’
- Consider the counterfactual?
- High risk intervention and much thought required
More Information

Path Analysis Training Event: CRN/CESI 8th December

References:


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