

Feasibility of a Proportionate Universal approach to the delivery of a family-based substance misuse prevention intervention: recruitment, group composition and implementation fidelity

David Gillespie, J. Holliday, J. Segrott, C. Hurlow, H Rothwell, S. Murphy, S. Morgan-Trimmer, J. Scourfield, Z. Roberts, D. Foxcroft, K. Hood, C. Phillips, H. Reed, I. Humphreys, L. Moore



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Introduction

- Universal prevention interventions often experience challenges in recruiting participants
- Universal interventions may reduce stigmatisation processes and risk of peer contagion found in targeted programmes
(Spoth, et al. 2007; Malti, et al. 2011)
- Can engage high risk families (Spoth & Redmond, 2002)
- But criticised for having lower levels of reach among individuals/families with the greatest support needs
(Dryden, et al., 2012, Shaw, et al. 2009)

Proportionate Universal (PU) Approach

(Marmot, et al. 2010)

- Combines universalism and targeting
- Universal provision of interventions aims to reduce stigmatisation and increase sustainability
- Targeted aspect involves varying “level and intensity of action ... proportionate to need”(p153)
- Feasibility of PU for prevention interventions under-researched
- How can interventions which use Proportionate Universalism:
 - avoid iatrogenic processes found in targeted interventions?
 - provide support for those with higher levels of need?
 - optimise recruitment, implementation & behaviour change?

Strengthening Families Programme 10-14

- Seven-week universal prevention intervention for groups of families with children aged 10-14
- Tightly structured with detailed manuals, videos and activities
- Wales, UK: implemented using a proportionate universal (PU) model, and subject of an RCT (Project SFP Cymru)
- PU model: group of 10-12 families which comprised:
 - Approximately 70% without higher needs/challenges
 - and 30% who might experience or present higher levels of need/challenge in a group setting
 - **Families with challenges = FWC**
 - **70/30 model**

SFP10-14UK in Wales

70/30 group composition model had three aims:

- optimise implementation **fidelity**, by reducing disruptions to programme activities
- optimise **behaviour change** processes, through creating pro-social group dynamics
- maximise participant **retention** by providing support for families with higher needs/challenges

Project SFP Cymru RCT

- SFP10-14 implemented in seven counties by local agencies (e.g. parenting teams, children's charities)
- Self-referrals in response to awareness-raising in communities and schools
- Referrals from agencies working with families
- Levels of challenge/need in group setting assessed by programme coordinator – including classification as FWC

Research aims

- Assess the extent to which the 70/30 group composition model was achieved
- Describe the challenges participants brought to the groups
- Examine relationship between group composition and:
 - group size
 - implementation fidelity
 - programme attendance
 - group dynamics
 - group management

Methods: data collection

- Study monitoring data on: recruitment, attendance, group composition (including 70/30 model), group size
- Groups categorised: 0-20%FWC; **21-40%**; 41-60%; >60%
- Interviews with delivery staff examined implementation
- Trial baseline data examined whether families with / without challenges differed on key variables
- Programme facilitators reported on fidelity of sessions
- Researchers observed a sample of sessions to assess reliability of facilitators' scores, and examine group dynamics and management

Methods: data analysis

- Logistic regression used to investigate variables associated with being a family classed as likely to experience challenges
- Variables associated with family categorisation at the 10% level in univariable analyses included in a multivariable model
- A two-level logistic regression model was fitted to fidelity data to compare the odds of reporting that all activities during a programme week were mostly/fully covered between different group compositions, group sizes, and week numbers
- Qualitative data from observations used to create criteria for assessing group dynamics and management
- Each observation sheet was then coded and scored

Findings: Fidelity to the 70/30 model

- Most programmes were comprised of a greater proportion of families without challenges than families with challenges (in line with the 70/30 model)
- 21 of 56 programmes achieved the exact group composition target
- But most other programmes were close to the target group composition

Reasons for allocation to ‘families with challenges’

- Main reasons for allocation to ‘families with challenges’:
 - Young people’s behaviour (29%)
 - Autistic spectrum related disorder (18.5%)
 - Literacy difficulties (12.0%)
- Other characteristics in referral forms not identified in the reason for allocation to ‘family with challenges’
 - 19.4% of the families with challenges also had behavioural problems,
 - 10.4% were known to Social Services
 - 9.4% had problems with family dynamics

Baseline variables associated with allocation to Families with Challenges

- Compared to families with one young person in the study, the odds of being categorised as likely to have challenges were more than doubled for **those with ≥ 2 young people** (OR=2.11; 95% CI: 1.44 to 3.10)
- Odds of being categorised as likely to experience challenge were 51% higher for those where the **average age was ≥ 12 years** (95% CI: 1.08 to 2.11)
- Compared to families where the highest qualification was degree-level or higher, the odds for those **families with no formal qualifications** was 2.59 times (CI 1.25-5.36)
- One-point increase on the **SDQ** associated with a 10% increase in the odds of being classed as a family likely to experience challenge (95% CI: 1.07 to 1.13)

Group composition & attendance / fidelity

- No relationship between group composition and:
 - attendance
 - Fidelity of programme implementation
 - group size

Group composition and group dynamics / management

- Groups with 21-40% FWC had the best group dynamics
- Groups with $\geq 41\%$ FWC had the poorest group dynamics
- Groups with 21-40% FWC had best group management
- Those with 0-20% FWC had the poorest group management

Views of programme staff: delivering the programme

- Supported 70:30 model: sessions would be unmanageable if only composed of families with challenges
- Where groups had higher levels of challenge this could impact on the ability of staff to deliver the activities
- The 70/30 model helped: manage participant behaviour, enable activities to be delivered as planned; allow support to be provided to families with higher level needs
- 70/30 model was seen as important in creating a positive learning environment, partly through role modelling between families

Conclusion

- Aim of creating groups with a mix of families who had differing levels of challenge was achieved overall
- Reach across different family backgrounds and support needs
- No association between group composition and: group size, attendance levels, or fidelity
- Levels of challenges within groups were not high enough to impact on implementation?
- Ratio between staff and families with challenges may have enabled support needs to be met, and engagement maintained
- 70/30 model appeared to aid group management, creation of a positive learning environment, and provision of support

Conclusion

- Proportionate universal model may help overcome unequal patterns of reach encountered by universal interventions
- Could have potential for avoiding harmful group processes which have been encountered in targeted interventions
- Study highlights the importance of examining how group-level processes form part of the implementation and change processes of group-based interventions

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