



# An Evaluation of the Early Intervention Support Service in Northern Ireland

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# A brief introduction ...

- Early Intervention Support Service (EISS) established as part of the Early Intervention Transformation Programme (EITP) in Northern Ireland
- EITP is a cross departmental government and philanthropic funded programme
- Focus is on improving outcomes for children and young people in Northern Ireland through establishing a range of early intervention approaches.



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# A brief introduction ...

- EISS aims to support and empower families with emerging vulnerabilities or needs by intervening early with evidence-informed services before difficulties become intractable, and before there is a need for statutory involvement
- 5 services, one in each Health and Social Care Trust
- EISS includes a service manager, 2.5 therapeutic workers, 1 full-time practical support worker and administrative support.



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# A brief introduction ...

- Contact within ten days of receiving a referral
- Waiting list no longer than four weeks before receiving an initial visit
- Workers trained in, and use, evidence-based therapeutic interventions: Solihull Approach, Solution-Focused Brief Intervention Therapy and Motivational Interviewing
- The Outcomes Star™ used to assess, plan and evaluate the intervention within families
- In addition, 5% of families could avail of Family Group Conferencing; Incredible Years and Strengthening Families parenting programmes



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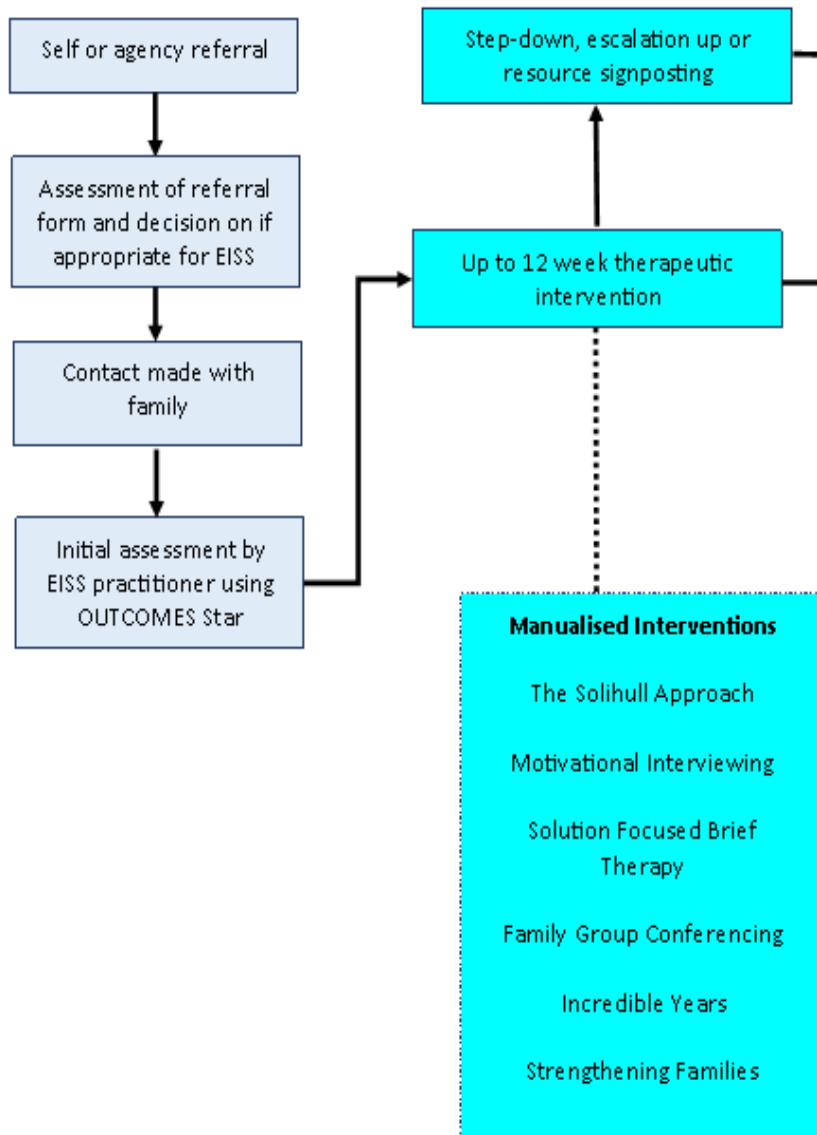
# EISS Evaluation Logic Model

## Population and resources

**Population: Tier 2 of Hardiker model**  
 Families who have children and require additional support for parenting skills and/or child emotional, behavioural and social issues, and who have no social service involvement

**Resources**  
 Joined up working between Family Support Hub and other statutory & non-statutory organisations  
 Resource building & training for EISS staff  
 Availability of appropriate resources (either step-up or step-down)

## Activities



## Outcomes

- Improved family functioning (FFQ):**
  - Improved problem solving skills
  - Improved communication skills
  - Improved personal goal setting
- Reduced parental stress (PSI):**
  - Reduced parental distress
  - Reduced parental-child dysfunctional interaction
  - Reduced perception by parent of child as difficult
- Improved parenting self-efficacy (TOPSE) in:**
  - 1) Emotion and affection, 2) Play and enjoyment, 3) Empathy and understanding, 4) Control, 5) Discipline and boundary setting, 6) Pressure, 7) Self-acceptance, and 8) Learning and knowledge.
- Improved child conduct and emotions (SDQ):**
  - Improved emotional symptoms
  - Reduction in conduct problems
  - Reduced hyperactivity
  - Reduced peer problems
  - Improved prosocial behaviour

**We expect to see significantly better scores at post-test for families who have gone through the EISS intervention, compared to the control group, on each of the outcomes listed above**

\* Based on ten outcomes star scales: physical health, wellbeing, emotional needs, child safety, social networks, education & learning, boundaries and behaviour, family routine, home and money, progress to work

# Research questions

- How effective is the EISS in improving outcomes for children and their families?
- What is the experience of delivering and taking part in EISS?
- What aspects of the EISS programme may need modification before a scaled roll-out is attempted?



# Sample

## Total number passed to QUB n=216

- Pre test intervention n=58
- Pre test control n= 51 TOTAL 109 parents/households
  
- Post test intervention n=47
- Post test control n=33 TOTAL 80 parents/households



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# Measures

- The family functioning scale (Roncone, 2007)
- Strengths and Difficulties Questionnaire (Goodman, 2001)
- Tool to Measure Parental Efficacy (TOPSE) (Kendall and Bloomfield, 2005)
- Parenting Stress Index (PSI) Short Form (36 questions) (Abidin and Burke, 1978)





# Methodological approach

- A non-randomised wait-list control group design.
- Each EISS used a four-week waiting-list to manage the number of referrals and caseloads of the support workers. This wait-list was the control group
- Pre-and post-test measures with families who were in contact with EISS;
- A qualitative process evaluation and;
- Descriptive and psychometric analysis of the outcomes star.



# Non randomized wait list design

**Northern**  
Referrals to  
service n=163

**South-Eastern**  
Referrals to  
service n=132

**Southern**  
Referrals to  
service n=137

**Western**  
Referrals to  
service n=182

**Northern**  
n=45  
Intervention=34  
Control=11

**South-Eastern**  
n=54  
Intervention=30  
Control=24

**Southern**  
n=58  
Intervention=21  
Control=37

**Western**  
n=59  
Intervention=39  
Control=20

Total number of  
parents passed to QUB  
n= 216

Excluded:

- Parents excluded (did not respond to initial contact) n=107. Intervention=60, Control=47.
- Parents unreachable for follow-up post-test n=29.
- One project area was not part of the study.

Pre-test Intervention n=58

Pre-test Control n=51

No follow-up contact  
made n =11

No follow-up contact made  
n = 18

Post-test Intervention n=47

Post-test Control n=33



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# Data collection

- An online survey designed and located on a server (LIME), hosted at QUB, and accessed via the internet.
- Desktop computers and an iPad were used to collect data, or a paper questionnaire where internet access was not available.
- Scales were computed from the raw data for 22 outcomes. Series of regression models to compare the mean scores for the intervention and control groups for each of the outcome measures at post-test, controlling for pre-test differences.
- The pre-test differences controlled for in the models were: pre-test scores on the outcome variable, age, gender, length of time between testing and trust area.



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# Comparison of scores on outcome measures at baseline by group

FFS_Communication	26.43 (2.1)	26.58 (2.2)	.763
FFS_Personal_Goals	19.66 (3.5)	19.06 (3.4)	.447
SDQ_Emootional	5.85 (3.0)	6.21 (2.6)	.571
SDQ_Conduct	4.38 (2.7)	4.94 (2.6)	.359
SDQ_Hyperactivity	7.15 (2.9)	6.58 (2.6)	.355
SDQ_Peer_Problems	3.43 (2.7)	3.36 (2.3)	.911
SDQ_Prosocial	7.02 (2.5)	6.73 (2.7)	.618
SDQ_Difficulties	20.81 (6.6)	21.09 (6.8)	.854
TOPSE_Empathy	48.15 (8.4)	46.58 (8.3)	.410
TOPSE_Play	50.77 (9.3)	47.36 (11.2)	.159
TOPSE_Emotions	52.06 (8.0)	52.18 (8.0)	.948
TOPSE_Control	37.53 (12.9)	34.12 (11.1)	.211
TOPSE_Discipline	41.19 (11.7)	38.76 (13.5)	.407
TOPSE_Pressures	34.19 (7.0)	35.39 (8.0)	.488
TOPSE_Self_Accept	48.91 (10.0)	49.12 (11.7)	.935
TOPSE_Learning	53.38 (9.7)	52.33 (9.0)	.619
PSI_Distress	39.60 (9.0)	40.42 (10.1)	.707
PSI_Dysfunctional	42.70 (7.0)	39.48 (6.7)	.042
PSI_Difficult_Child	32.49 (7.6)	31.48 (6.6)	.532
PSI_Total_Stress	114.79 (18.1)	111.39 (19.4)	.432



# Main effects

Outcome	Adjusted Post-Test Mean Scores				Sig	Effect Size (Hedges' g)
	Intervention		Control			
	Mean (SD)	n	Mean (SD)	n		
FFS Score	70.7 (8.7)	47	70.0 (9.2)	33	.724	.09 [-.36, .53]
FFS_Problem_Solving	23.3 (5.6)	47	22.6 (4.7)	33	.599	-.45 [-.90, .00]
FFS_Communication	26.5 (2.0)	47	26.9 (2.4)	33	.598	-.16 [-.60, .29]
FFS_Personal_Goals	20.7 (3.9)	47	20.4 (3.5)	33	.710	.09 [-.35, .54]
SDQ_Emotional	4.8 (3.0)	47	5.9 (2.5)	33	.130	-.37 [-.82, .08]
SDQ_Conduct	3.9 (2.5)	47	4.2 (2.6)	33	.563	-.12 [-.56, .33]
SDQ_Hyperactivity	6.2 (3.2)	47	6.1 (2.7)	33	.885	.03 [-.42, .47]
SDQ_Peer_Problems	3.4 (2.7)	47	3.4 (2.1)	33	.867	.03 [-.41, .48]
SDQ_Prosocial	7.1 (2.5)	47	7.6 (2.4)	33	.409	-.19 [-.63, .26]
SDQ_Difficulties	18.6 (7.9)	47	19.7 (6.8)	33	.501	-.15 [-.60, .29]
<b>TOPSE_Empathy</b>	<b>52.3 (6.6)</b>	<b>47</b>	<b>47.6 (6.9)</b>	<b>33</b>	<b>.014</b>	<b>.67 [-.22, 1.13]</b>
<b>TOPSE_Play</b>	<b>53.2 (6.5)</b>	<b>47</b>	<b>48.8 (10.2)</b>	<b>33</b>	<b>.039</b>	<b>.56 [-.10, 1.01]</b>
TOPSE_Emotions	46.3 (4.5)	47	44.7 (5.2)	33	.258	.33 [-.12, .78]
TOPSE_Control	40.0 (7.9)	47	38.3 (8.1)	33	.550	.16 [-.29, .60]
TOPSE_Discipline	45.2 (11.0)	47	40.8 (12.0)	33	.150	.38 [-.07, .83]
TOPSE_Pressures	47.4 (11.6)	47	44.8 (14.3)	33	.540	.20 [-.24, .65]
TOPSE_Self_Accept	46.7 (6.2)	47	43.4 (5.6)	33	.084	.49 [-.03, .94]
TOPSE_Learning	54.4 (7.1)	47	52.7 (8.3)	33	.474	.21 [-.23, .66]
PSI_Distress	41.3 (8.7)	47	42.3 (10.3)	33	.568	-.11 [-.55, .34]
PSI_Dysfunctional	42.6 (6.5)	47	44.5 (7.4)	33	.258	-.27 [-.72, .18]
PSI_Difficult_Child	32.5 (8.6)	47	34.3 (7.1)	33	.408	-.23 [-.67, .22]
PSI_Total_Stress	116.2 (18.4)	47	121.4 (21.1)	33	.241	-.27 [-.71, .18]



# Summary of Quantitative Findings

- Only two of the 22 outcomes were associated with statistically significant effects ( $p < .05$ ): TOPSE Empathy and TOPSE Play. Taken in isolation, misleading to emphasise these as providing evidence of the effectiveness or ineffectiveness of the intervention.
- With 22 outcomes, it is expected that at least one of these could show a statistically significant effect just due to random variation. Given this, and given the lack of corroborating evidence in relation to the other outcomes, it is quite plausible that both simply reflect random fluctuations in the data rather than indicating any real effects of the intervention.



# Outcomes Star



Star Chart



Licensed to Public Health Agency until 11/03/2018

## My Star™

The Outcomes Star for children and young people

Name

First

Review

Retrospective

Date of completion

Completed by

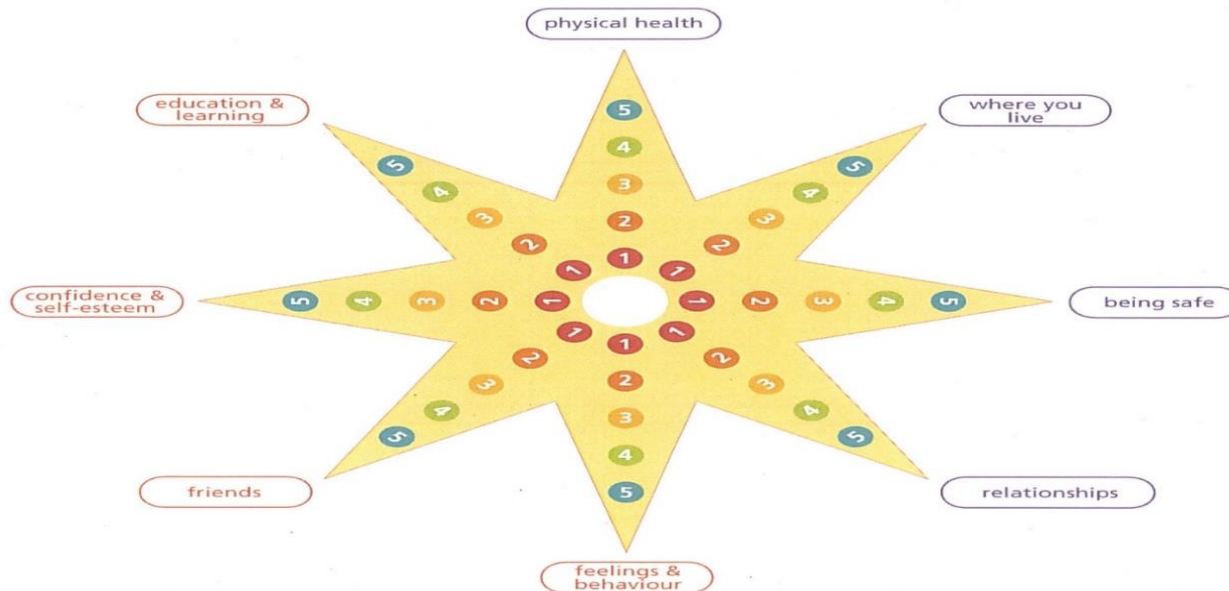
Worker and me

Worker alone

Me

How well other people look after you

How you are managing



Name: I was involved in completing this Star Chart



# Family Star Plus

- Physical health
- Your well-being
- Meeting emotional needs
- Keeping your children safe
- Social networks
- Education and learning
- Boundaries and behaviour
- Family routine
- Home and money
- Progress to work



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# Family Star Plus

- A score of 1-2 indicates the parent feels **stuck**. They are not able to deal with the problem or accept help.
- A score of 3-4 indicates the parent is **accepting help**. They are aware of their problems and look to other people for help sorting it out.
- A score of 5-6 indicates the parent is **trying** to make a difference or change to their parenting but find it hard.
- A score of 7-8 indicates the parent is **finding what works** in managing their children's needs but will still need a degree of support.
- A score of 9-10 indicates the parent is, or is moving towards, **effective parenting** and does not need support in this area.



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# Family Star Plus in this study

Domain (n. of cases)	Decreased (%)	Stayed the same (%)	Increased (%)
Physical health (313)	2.6	55.9	41.5
<b>Your well-being (736)</b>	<b>3.5</b>	<b>25.1</b>	<b>71.4</b>
<b>Meeting emotional needs (738)</b>	<b>2.7</b>	<b>18.8</b>	<b>78.5</b>
Keeping your children safe (359)	0.8	45.7	53.5
Social networks (514)	1.4	35.0	63.6
Education and learning (606)	2.8	33.2	64.0
<b>Boundaries and behaviour (858)</b>	<b>2.6</b>	<b>16.4</b>	<b>81.0</b>
<b>Family routine (633)</b>	<b>2.5</b>	<b>28.6</b>	<b>68.9</b>
Home and money (323)	3.1	48.0	48.9
Progress to work (156)	4.5	57.1	38.4



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# Qualitative Findings

- Service well received by parents and children in particular the workers:
  - Their status (non social worker)
  - Their flexibility
  - Their emphasis on listening, practical help delivered in a responsive, timely and non judgemental way
  - Interventions were time limited



# Discussion

- Service design
- Evaluation design
- Measures and outcomes
- Expectations
- Future directions



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# Full report and references

- [https://pure.qub.ac.uk/portal/files/155982564/FINAL\\_EISS\\_Report\\_110618.pdf](https://pure.qub.ac.uk/portal/files/155982564/FINAL_EISS_Report_110618.pdf)

Any questions?



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