

# Fidelity: Preventing Drift

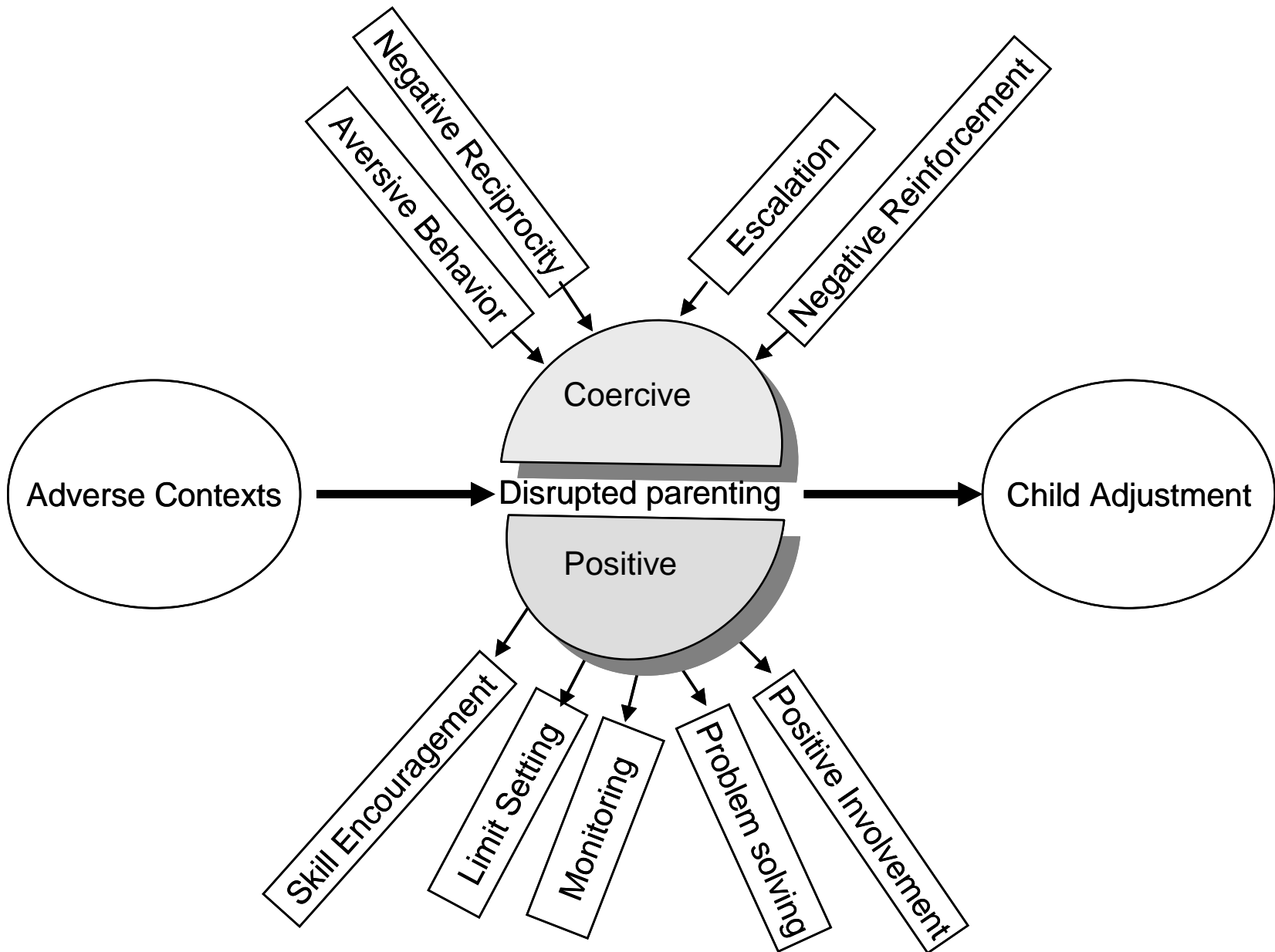
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**Oregon Social Learning Center**

**Paper presented at the Institute of Medicine's Forum on Promoting Children's Cognitive, Affective, and Behavioral Health, Washington DC, November 5-6, 2014.**

# Social Interaction Learning Model



# OSLC RCTs

## SAMPLES

Divorced Mothers (PTC)

Step-families (MAPS)

School in High Crime  
Neighborhoods (LIFT)

Maltreated Children

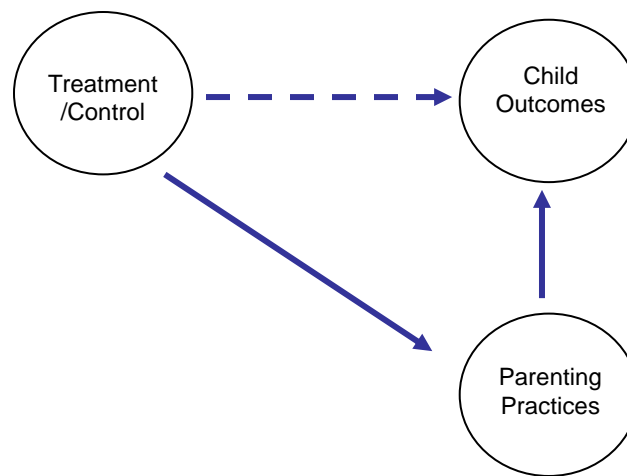
Adjudicated Youth

Treatment Foster Care:  
Delinquents - Boys

Treatment Foster Care:  
Delinquents - Girls

Foster Care: Mentally Ill  
(Hospitalized)

Early Intervention  
Treatment Care (2-4)



## POSITIVE PARENTING PRACTICES

Skill Encouragement

Positive Involvement

Effective Discipline

Problem-solving

Monitoring / Supervision

## COERCIVE PARENTING

Negative Reciprocity

Escalation

Negative Reinforcement

## CHILD OUTCOMES

Arrest Rates / Severity  
of Crime

Substance Use

Noncompliance

Delinquent Behaviors

Academic Function

Out of Home Placement

Deviant Peer  
Associations

Depression

## PARENT OUTCOMES

Depression

Standard of living

Arrest rates

Marital adjustment

Marital satisfaction

# Implementation through Full Transfer

- EBP is fully transferred from purveyor to adopting community
- Wide-scale Implementation
- Requires oversight by governing authority that can & will sustain
  - Model Fidelity
  - Effective Treatment Outcomes
- Starts with visionary leader(s) committed to effecting lasting change
  - Social Political Capital
  - Resources
  - Longevity
- Sustained by satisfied families & practitioners
- Fidelity Measure: *Fidelity of Implementation (FIMP)*
  - Observations based on intervention sessions
  - Ratings of practitioner adherence and competence

## ***Host Community***

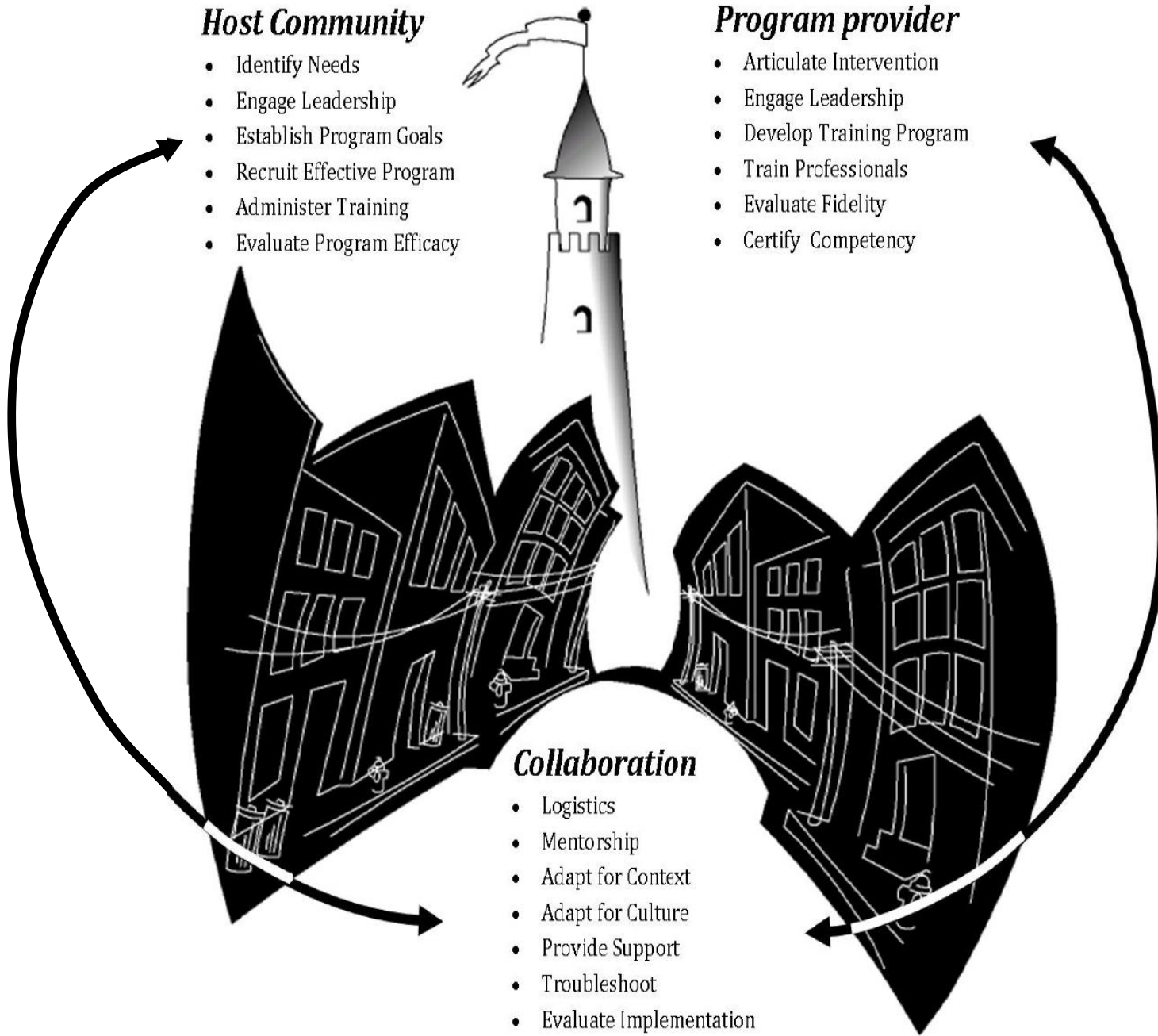
- Identify Needs
- Engage Leadership
- Establish Program Goals
- Recruit Effective Program
- Administer Training
- Evaluate Program Efficacy

## ***Program provider***

- Articulate Intervention
- Engage Leadership
- Develop Training Program
- Train Professionals
- Evaluate Fidelity
- Certify Competency

## ***Collaboration***

- Logistics
- Mentorship
- Adapt for Context
- Adapt for Culture
- Provide Support
- Troubleshoot
- Evaluate Implementation
- Make Sustainable





Iceland

Norway

Denmark

Netherlands

Oregon

Minnesota

Michigan

NYC

Kansas

Mexico City

Puerto Rico

Northern Uganda

PMTO

# Large-Scale PMTO Implementations

<u>Site</u>	<u>Scale</u>	<u>Date Initiated</u>	<u>System of Care*</u>
Norway	Nationwide	1999	CMH & CW
Iceland	Nationwide	2000	CMH & CW
Michigan	Statewide	2004-2006	CMH
**Denmark	Nationwide	2006	CMH & CW
The Netherlands	Nationwide	2006	CMH
Detroit	City/Countywide	2007	CMH
Kansas	Statewide	2011	CW
**Trained by Norway *Child Mental Health (CMH) *Child Welfare (CW)			





Mexico City



Northern Uganda



The Netherlands

New York City



Detroit



# Evaluations of PMTO Implementations

- Norway: many RCTs showing positive effects
  - Iceland: a nationwide RCT showing positive effects
  - Netherlands: a nationwide RCT in progress
  - Denmark: an RCT in progress
  - Mexico city: an RCT soon to be published
  - Minnesota: tailored for military families; an RCT underway
- 
- Michigan: statewide, qualitative study and preference study
  - Spanish-speaking Latinos in Detroit; high retention rate & satisfaction; RCT and more research in progress
  - Kansas: earlier reunification & greater retention in treatment; RCT and more research in progress

# Implementation Feedback Process





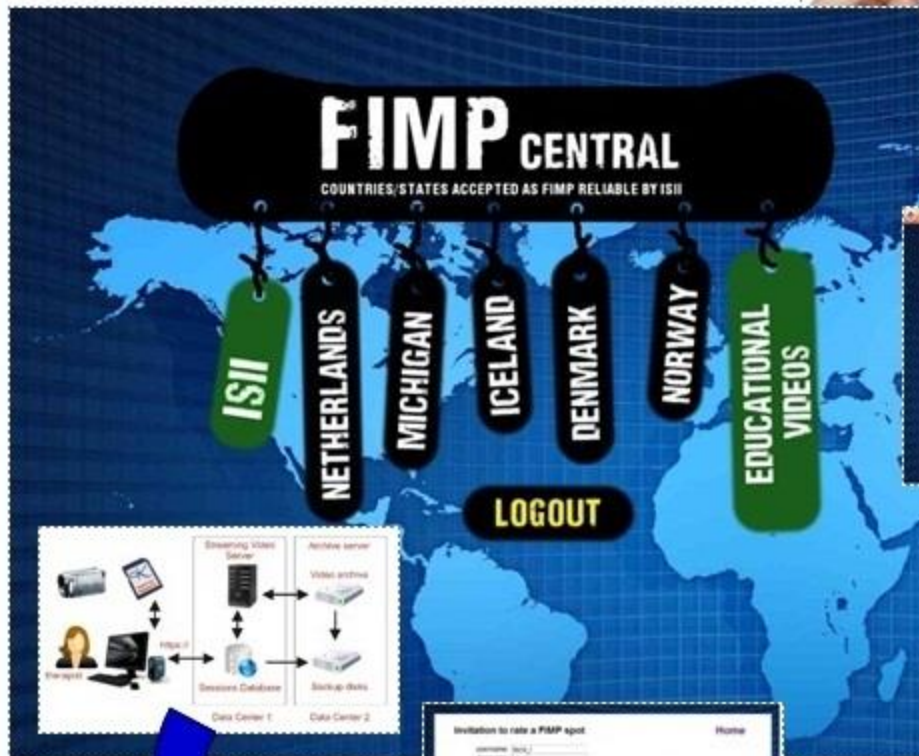
#### Terms to Clarify:

**PMTO** = Parent Management Training – Oregon model  
**ISI** = Implementation Sciences International, Inc.  
**FIMP** = Fidelity of Implementation  
**FIMP spot** = a short (10 min) video clip of a PMTO therapy session to be rated for fidelity to the original PMTO model  
**REL** = A reliability measure, in which two or more certified FIMP raters rate the same FIMP spot and compare scores

#### The FIMP Central Website: How ISI keeps the Orchestra in Tune

An orchestra conductor can use a Tuning Fork to ensure that each instrument is in tune with all the others. Similarly, ISI can use the secure online environment of the FIMP Central website to ensure fidelity to the original PMTO model. As FIMP team leaders from around the world upload, view and rate FIMP spots with their own team members, ISI is able to compare each team's ratings to ISI's "True Scores," ensuring fidelity to the original PMTO model.

In addition to providing a means for FIMP teams to calibrate themselves to the standards set by ISI, the FIMP Central website provides a means for FIMP teams around the world to monitor their own team, store their ratings and reliability scores in a centralized online archive, and have their reliability recertified annually through ISI.



**Invitation to rate a FIMP spot**

username: [text]  
 password: [text]  
 e-mail: [text]  
 name: [text]

ISI invites you to rate the following FIMP spot:

[video icon] [text]

**Team Leader Comments:**

[text area]



REL MONTH/YEAR	ISI
May 2011	
April 2011	
March 2011	OK2 ID
February 2011	OK1 TE
January 2011	OK1 ID
December 2010	OK1 TE
November 2010	OK1 ID
October 2010	
September 2010	
August 2010	
July 2010	
June 2010	

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Kristina Scott

Molly Willer

Ana A. Baumann

Kelly Young

Mary Conley

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# **Fidelity of Implementation Rating System (FIMP):**

## **The manual for PMTO®**

(Knutson, Forgatch, Rains, & Sigmarisdóttir, 2009, rev.)

### **9-Point Likert Scale**

Good work = 7-9; Acceptable = 4-6; Needs Work = 1-3

<b>Knowledge:</b>	Proficiency in understanding & application core components
<b>Structure:</b>	Session management, pacing/timing, responsiveness
<b>Teaching:</b>	Promotes mastery, use of role play, problem solving
<b>Process:</b>	Clinical & strategic skills, supportive context for learning
<b>Overall:</b>	Growth, satisfaction, likely return, adjust context, difficulty

**Sessions scored for Certification: Encouragement and Limit Setting**



# **Uses of FIMP**

**Teaching tool for training and coaching**

**Evaluation of training & certification**

**Evaluation of drift across generations**

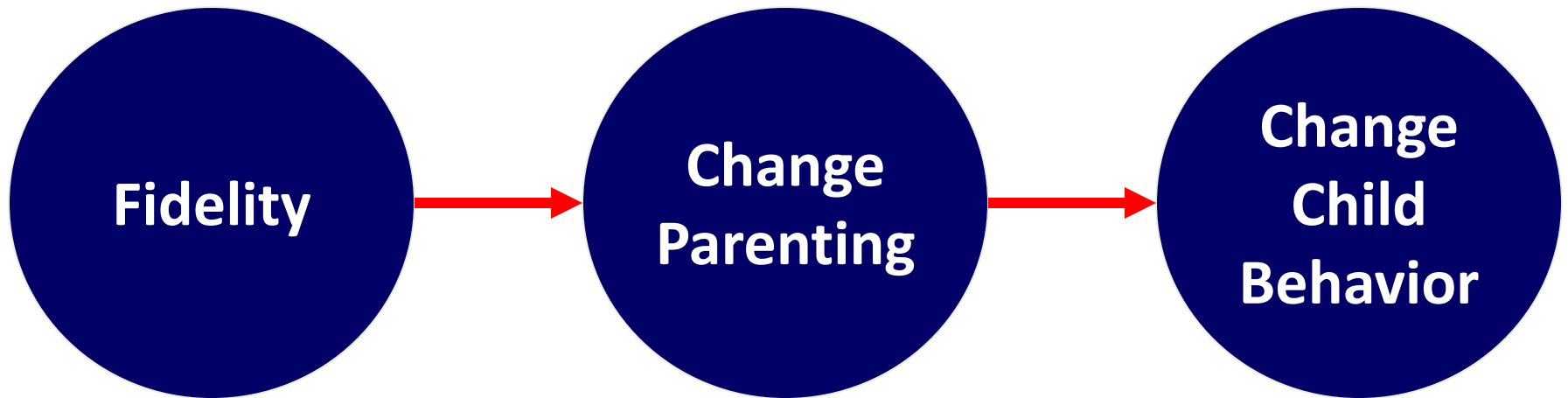
**Evaluation of drift within a generation**

**Assess mechanisms**

**Does fidelity predict improved parenting?**

**Does fidelity predict improved child outcomes?**

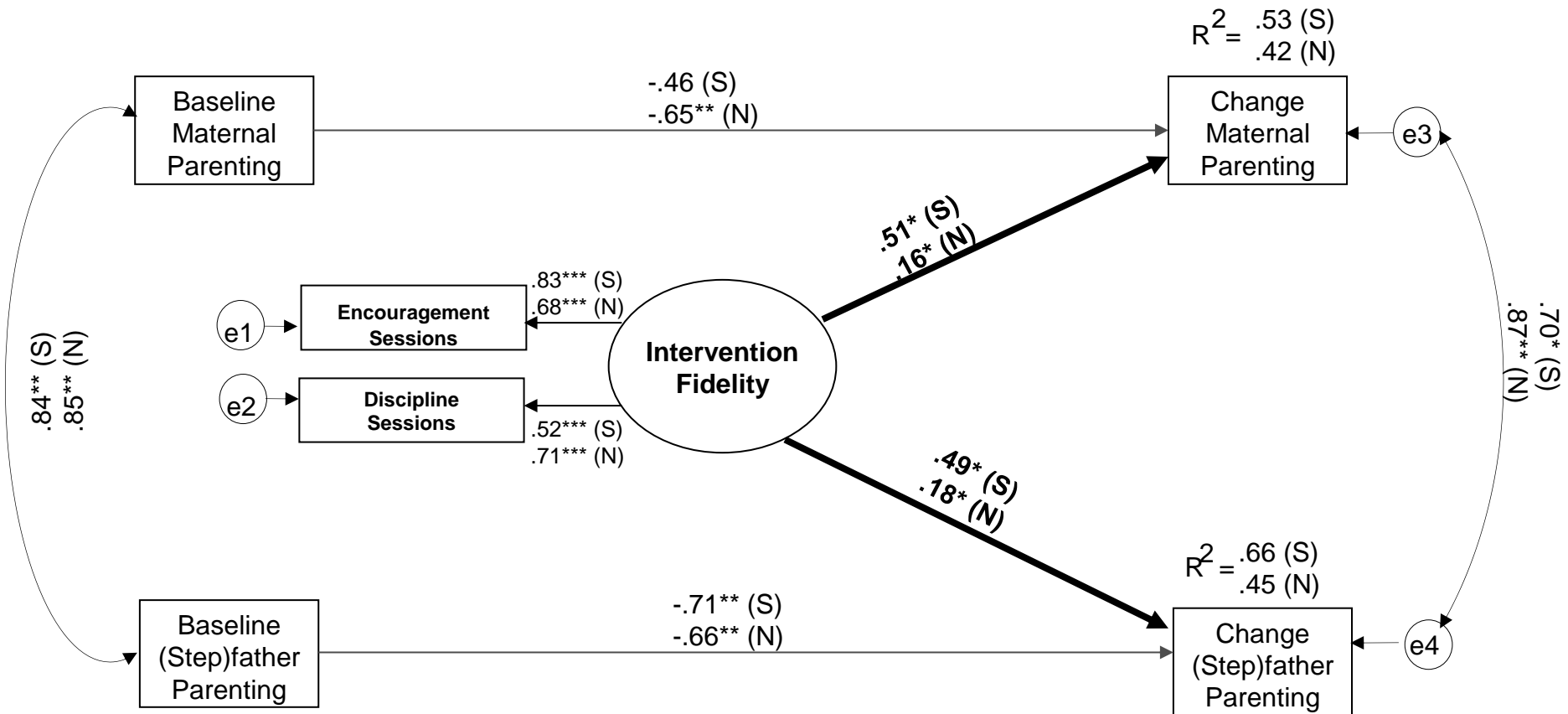
# Predictive Validity of Fidelity



# FIMP Predictive Validity in Two Samples: Effects of FIMP on Pre/Post Change in Observed Parenting

**S** = Efficacy Trial: Stepfamily Prevention Sample – N = 4 Therapists; N = 20 Families

**N** = Effectiveness Trial: Norwegian Clinical Sample – N = 114 Therapists; N = 238 Families



**Stepfamily Sample:** chi-square = 9.113, df = 12,  $P = .693$ , CFI = 1.000, cmin df = .759, rmsea = .000;  $tp < .10$ ;  $*p < .05$ ;  $**p < .01$ ;  $***p < .001$ ; Forgatch, Patterson, & DeGarmo (2005)

**Norwegian Sample:** chi-square = 9.113, df = 12,  $P = .693$ , CFI = 1.000, cmin df = .759, rmsea = .000;  $tp < .10$ ;  $*p < .05$ ;  $**p < .01$ ;  $***p < .001$ ; Forgatch & DeGarmo (2011)

# Predictive Validity of FIMP in Norwegian Sample: FIMP and Alliance Effects on Change in Child Outcome

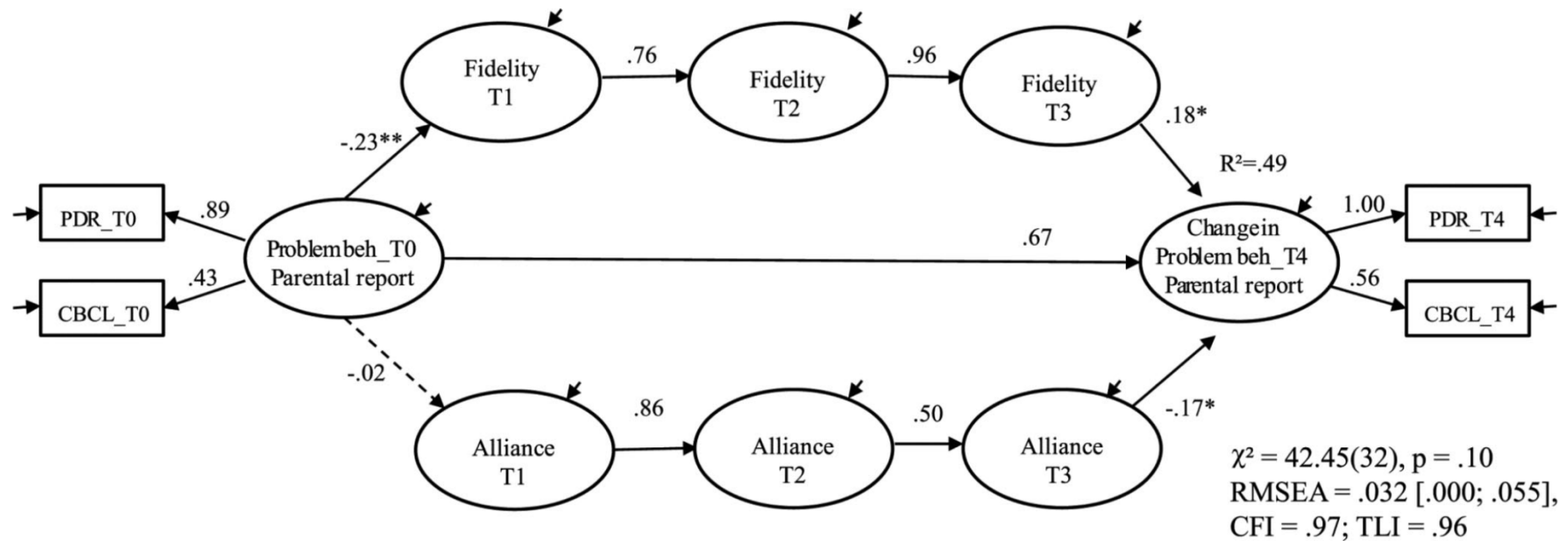
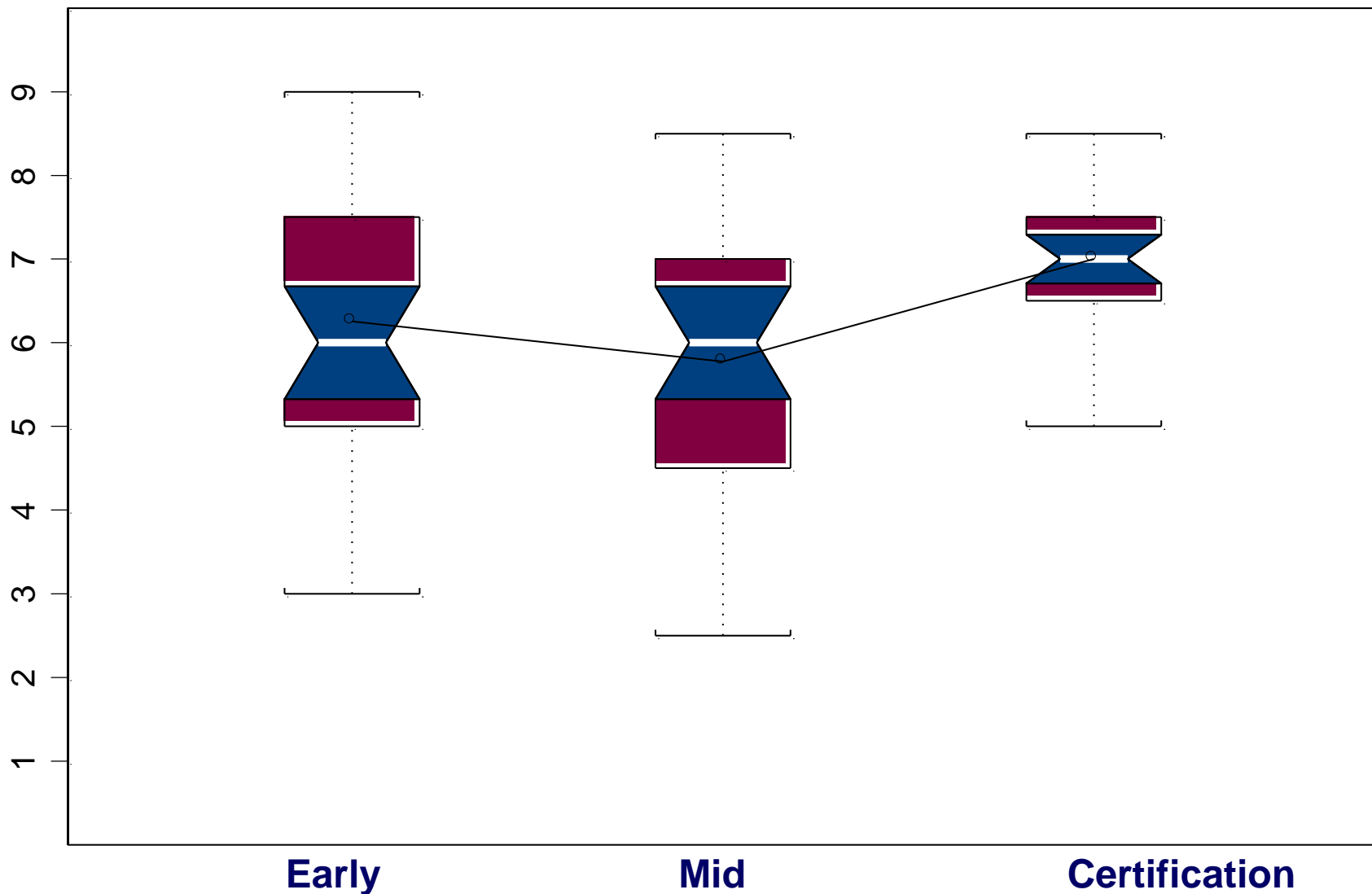


Figure 3. Structural model for fidelity, alliance, and parent-reported externalizing problem behaviors ( $N = 328$ ). Coefficients are completely standardized estimates. Significant paths are in whole lines (\*  $p \leq .05$ ; \*\*  $p \leq .01$ ), whereas nonsignificant paths are presented by stippled lines ( $p > .05$ ). All paths between same construct were at  $p \leq .001$ . The error variance for PDR\_T4 was constrained to zero because of a nonsignificant, negative residual variance. PDR = Parent Daily Report; CBCL = Child Behavior Checklist; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker Lewis index; T = time; beh = behavior.

# Norway G1 during Training: FIMP Scores



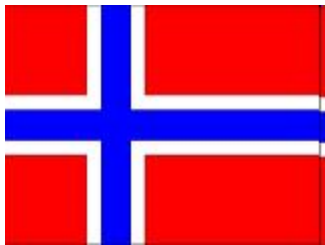


# Norway

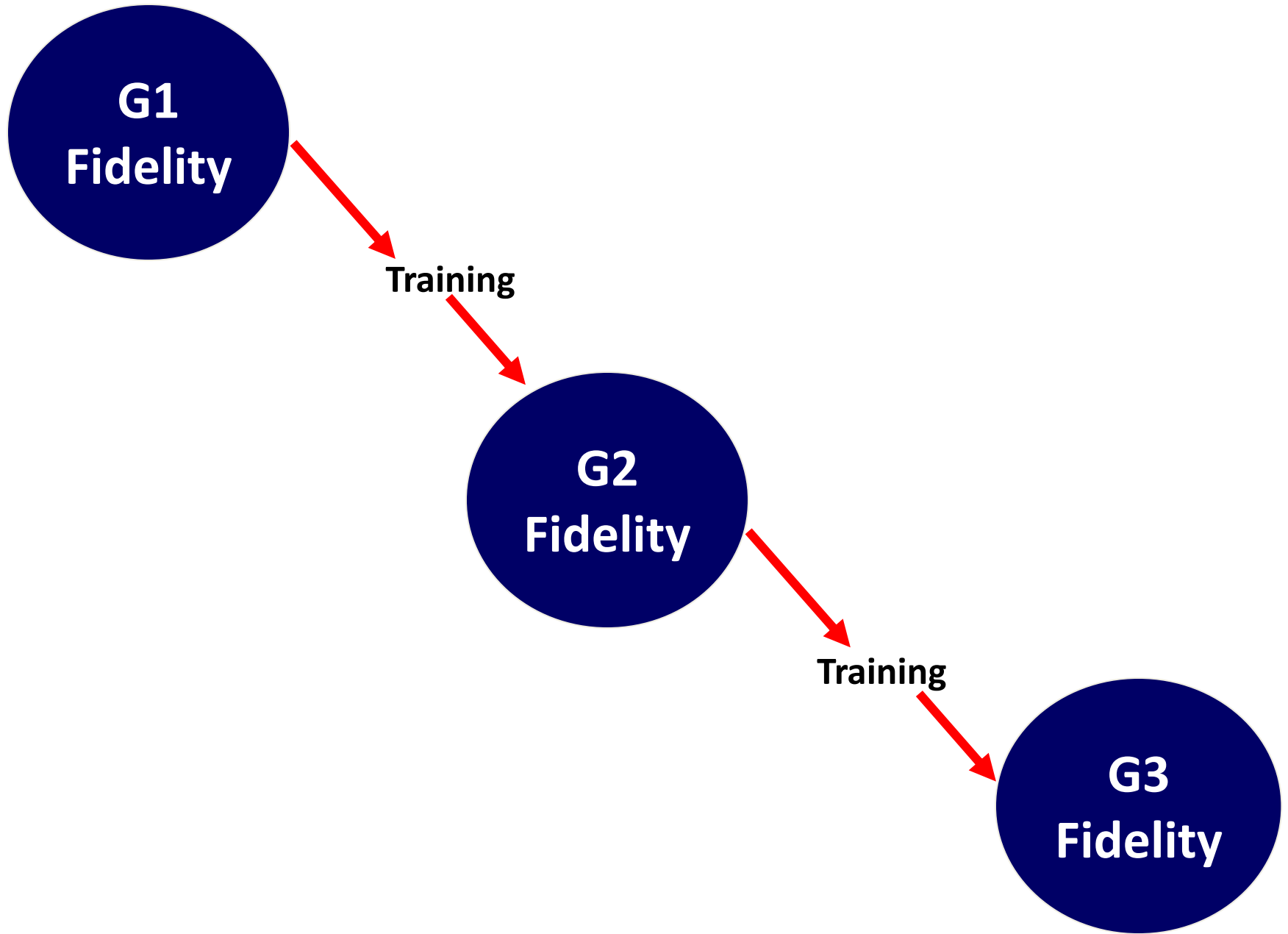
29

300/1200

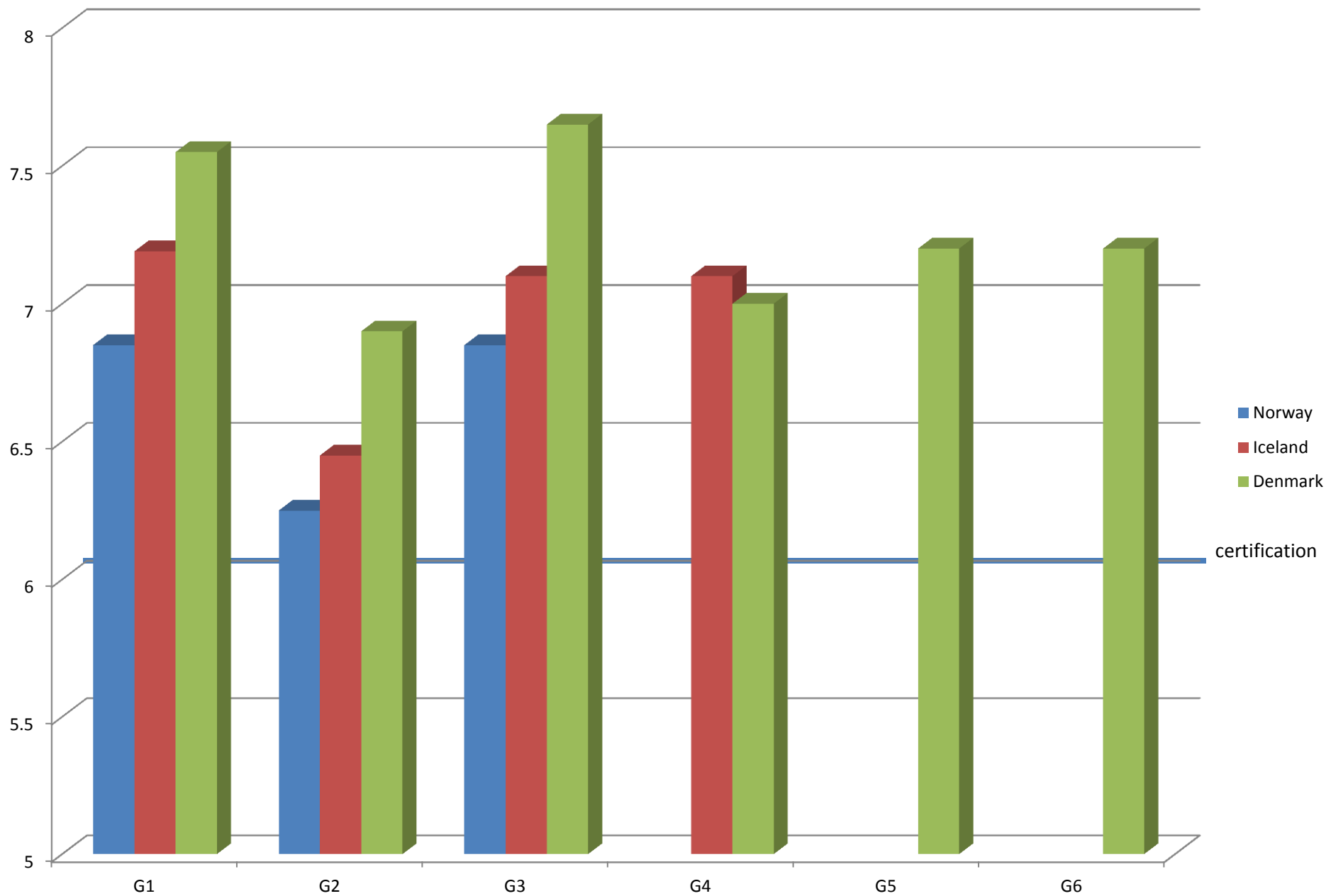
25,000



# Fidelity Drift Across Generations



# Norway, Iceland, and Denmark: FIMP Scores by Generation



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