V ANNUAL CAMPBELL COLLABORATION COLLOQUIUM

The Effectiveness of Families and Schools Together: Improving Parent, Child, and School Outcomes *

Haluk Soydan (Institute for Evidence Base Social Work Practice)
Chad Nye (University of Central Florida)
Salvador Chacón-Moscoso (University of Seville)
Julio Sánchez-Meca (University of Murcia)
David Alarcón-Rubio (University of Seville)
Susana Sanduvete Chaves (University of Seville)

Introduction

- Among preventive programs for younger children, Families and Schools Together program (FAST) seems promising and takes an outstanding place (See Layzer et. al. 2001).

- FAST has been implemented in 45 states in the United States, and internationally in five countries (Australia, Austria, Canada, Germany, and Russia).

Philosophy of FAST

Families and Schools Together (FAST) **builds protective factors** on multiple levels around children identified by teachers as being **at risk of failure in school**. It is a positive approach based on family systems and community/school/parent collaborations to **enhance the child's functioning** in school, in the community, and at home

Program of FAST

FAST is an eight-week, multi-family group process with structured activities to build social connections and reduce social isolation in 3 steps:

Step 1 FAST

An outreach process by trained FAST team partners to invite whole family participation in FAST with face to face visits at the parents' convenience;

Step 2 FAST

An 8 week multi-family engagement process for 8-12 families facilitated by a trained parent-professional partnership (for which there are site-based training visitors who directly observe pilot implementations and work to adapt the process to respon local needs);

Step 3 FAST

An ongoing two year FASTWORKS reunion process of monthly multi-family meetings of FAST graduates which is run by the families with support of the team.

FAST Program Goals

- Enhance family functioning.
- Prevent the target child from experiencing school failure.
- Prevent substance abuse by the child and family.
- Reduce the stress that parents and children experience from daily life situations.

Review Question

How effective is the FAST program in improving child, parent, and school outcomes?

Specific Outcomes

Outcomes related to Child

- Social skills
- Attention span
- Academic competence and performance
- Level of aggression at home and in the classroom
- Level of anxiety and depression

Outcomes related to Parent

- Level of anxiety and depression
- Parent involvement in school
- Relationship outcomes
- Level of family conflict
- Objectives of the Review

Method

Search for studies to review:

- Primary source for identified studies was the FAST Center at the University of Wisconsin, Madison, WI and the program originator, Dr Lynn McDonald.
- Search strategies included electronic searches to include: ERIC, PSYCH Info, Educational Abstraction Abstracts, Academic Index, SocAbstracts, NCJRS Abstracts, and Dissertation Abstracts
- International.

Method

Inclusion and Exclusion Criteria

- Only randomized trials with assignment to either a treatment or control condition prior to the initiation of the FAST program are included in the review.

- Only available studies conducted in the United States are included in the review

Families & Schools Together

Funding Source	NIDA	OERI	OSERS	SAMHSA
Location	Inner City- Latino/ African American	Rural-Native American	Urban- African American	Urban- Latino/African American
Sample Size	473 Families 10 Schools	100 Families 3 Schools	407 Families 9 Schools	67 Families 8 Schools
Follow Up	2 year	1 year	1year	1 year
Design	R of classes prior to recruitment into program	Tch CBCL used to match before R assign	Recruited at sch level; R of matched pairs with Tch CBCL	R of matched pairs with Tch CBCL

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Assessment of Methodological Quality: Coding System

1. Sample Characteristics
- **Child age**

  Age (Range)

  Age (mean)
- **SES**

2. Intervention Characteristics
- **length of program**
- **number of sessions**

Coding System

3. Design

- Experimental ; randomized

4. Units Random Assignment

- None and without control of extraneous variables
- None but with control of extraneous variables.
- Yes

Coding System

5. Sample size
- n <5
- 5 <n <10
- n >10

6. Attrition in experimental group posttest
- > 30 %
- <30 %
- Without Attrition

Coding System

7. Follow-up period
- < 6 months
- 6-11 months
- > 11 months

8. Moments of measurement
- Post intervention
- Pre and post intervention

9. All measures in pretest appear in posttest
- No
- Some
- All of them

Coding System

10. Normalized dependent variables
- Without (self-reports and post hoc records)
- Questionnaires or standardized self-reports
- At least one is objective (psychophysiological measures)

11. Intervention homogeneity
- subjects do not receive the treatment in the same contextual conditions
- subjects receive treatment in the same contextual conditions

12. Control Techniques
- Blind (beneficiaries)
- Blind (implementers)
- Both
- Other

Outcomes Measures & Variables

- **Child Behavior Checklist (CBCL)**
  - Subscore for internalizing behavior
  - Subscore for externalizing behavior

- **Social Skills Rating System (SSRS)**

Procedure

1. Two independent reviewers completed the assignment of the quality issues.

2. All questions concerning the rating of methodological quality was resolved through a consensus decision process.

3. Outcomes variables: CBCL and SSRS were rated by teachers and parents.

4. Analysis Instruments: SPSS 11.0 to codify and analyze data. And Comprehensive Meta-analysis for E.S. estimations

Descriptive Results

1. Sample Characteristics
- **Child age**

  Age (Range): 6-10

  Age (mean) = 7.37
- **SES: low income**

Descriptive Results

2. Intervention Characteristics

- **length of program:**   8 weeks
- **number of sessions:**   8
- **length of sessions:**   2.5 hours

Descriptive Results

3. Design
   - Experimental ; randomized
4. Units random assignment
   - Yes
5. Sample size
   - n >9
6. Attrition in experimental group posttest
   - <30 %

Descriptive Results

7. Follow-up period

- **> 11 months**

8. Moments of measurement:

- **Pre and post intervention**

9. All measures in pretest appear in posttest.

- **All of them**

Descriptive Results

10. Normalized dependent variables

- Questionnaires or standardized self-reports

11. Intervention homogeneity

- subjects receive treatment in the same contextual conditions

12. Control Techniques

- Blind (implementers)
- Other

FAST		Immediate CBC	1 Year Post CBC	2 Years Post CBC
Parents	Externalization	Study 1: M & SD	Study 1: M & SD	
		Study 2: F value	Study 2: F value	
		Study 3: M & SD	Study 3:M & SD	Study 3:M & SD
		Study 4: F value	Study 4: F value	
	Internalization	Study 1: M & SD	Study 1: M & SD	
		Study 2: F value	Study 2: F value	
		Study 3: M & SD	Study 3:M & SD	
		Study 4: F value	Study 4: F value	
Teachers	Externalization	Study 1: M & SD	Study 1: M & SD	
		Study 2: F value	Study 2: F value	
		Study 3: M & SD		Study 3:M & SD
		Study 4: F value	Study 4: F value	
	Internalization	Study 1: M & SD	Study 1: M & SD	
		Study 2: F value	Study 2: F value	
		Study 3: M & SD		
		Study 4: F value	Study 4: F value	

Outcome Variable (average postest effects)

Child Behavior Checklist Internalization: Teacher
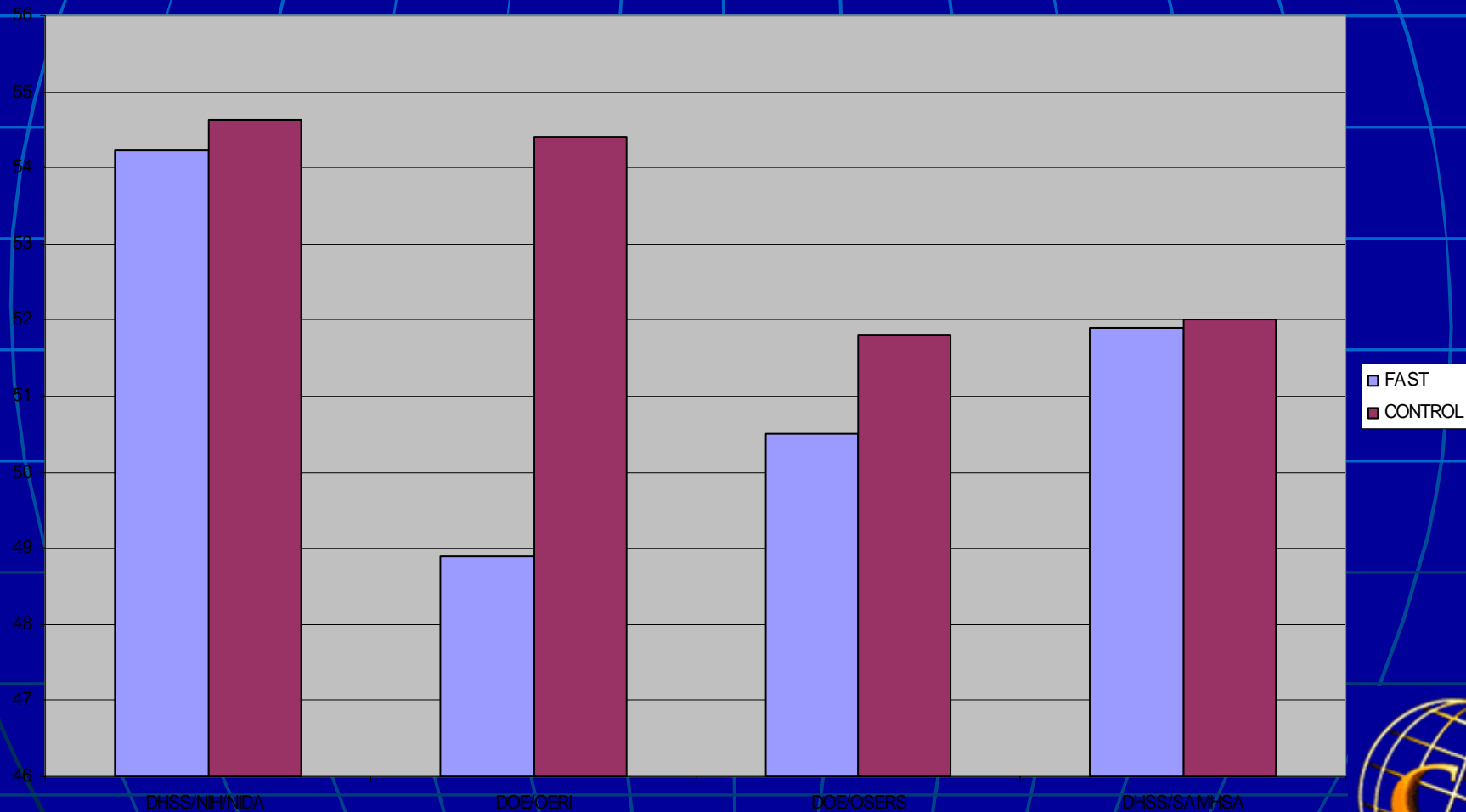
Outcome Variable (average postest effects)

Child Behavior Checklist Externalization: Teacher

Outcome Variable (average postest effects)

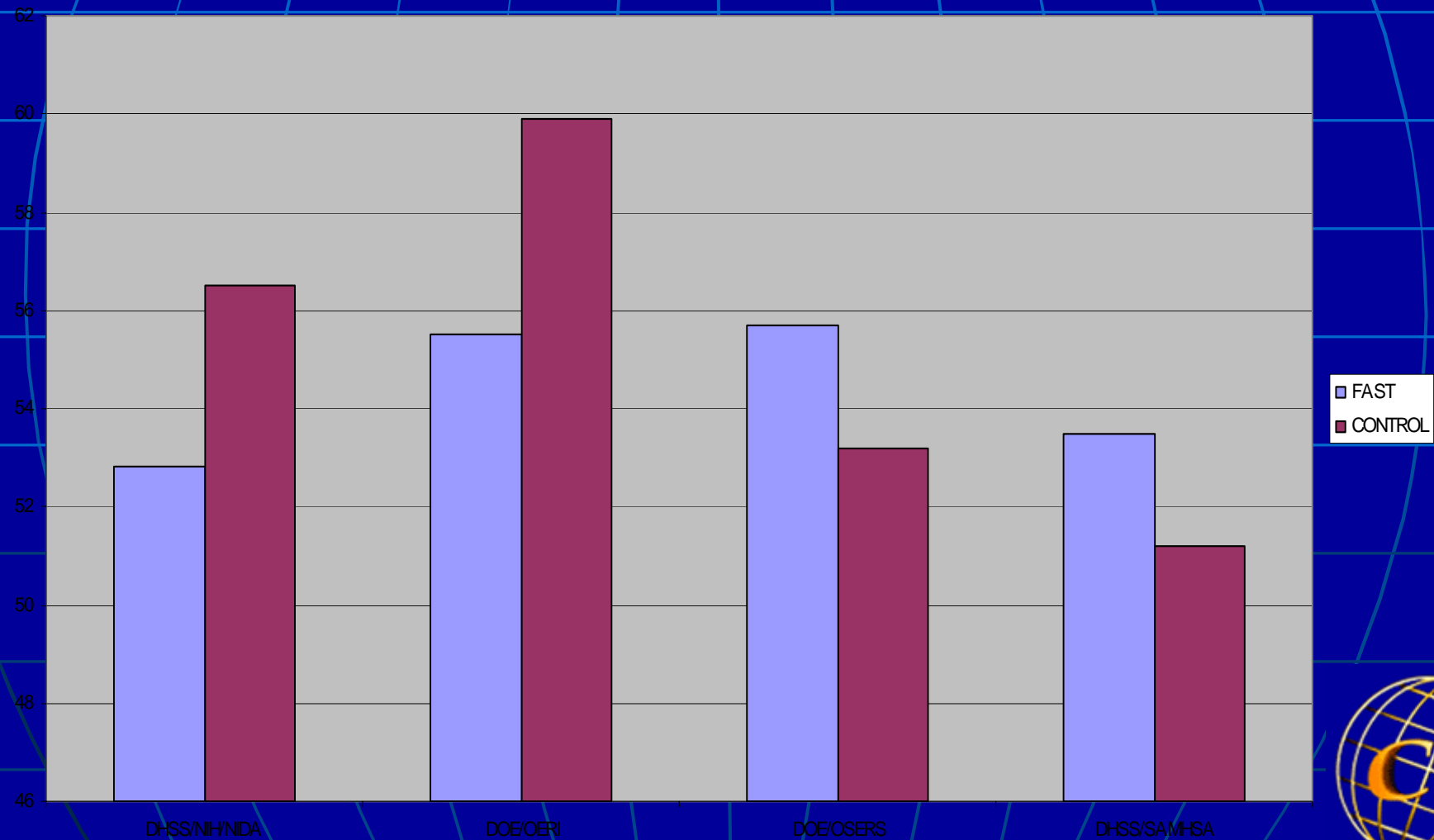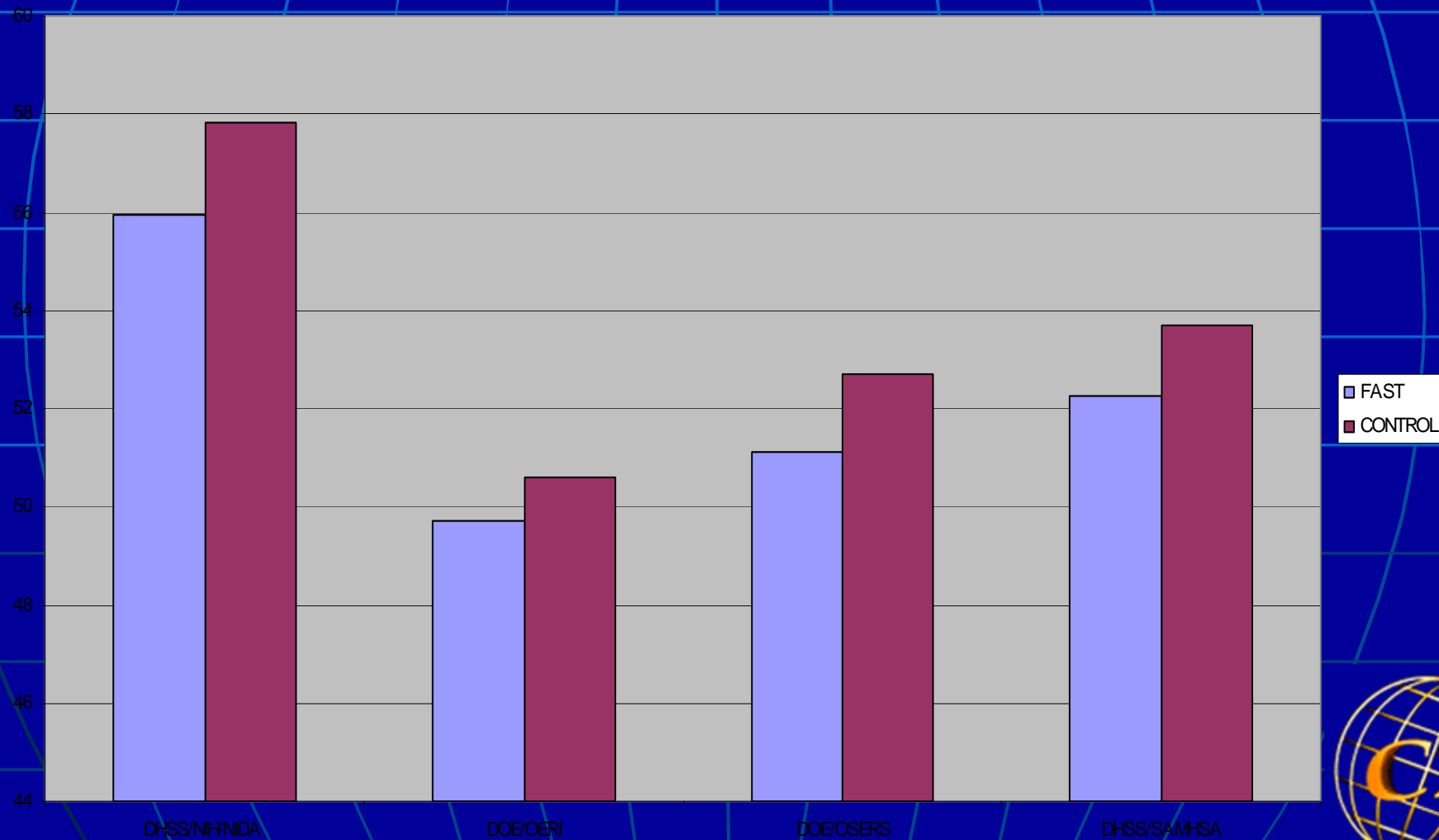## Child Behavior Checklist Internalization: Parent

Outcome Variable (average postest effects)

Child Behavior Checklist Externalization: Parent
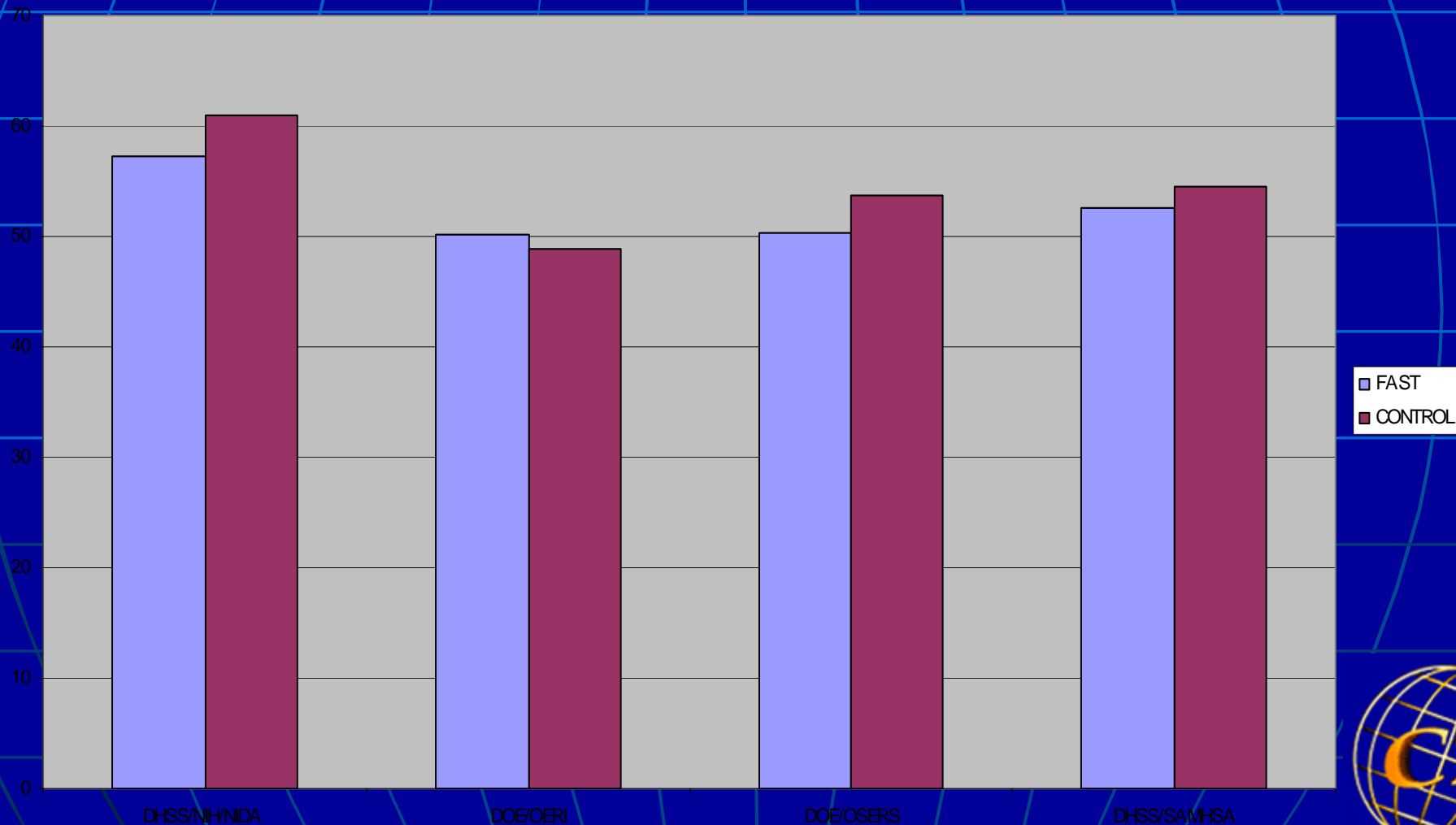
Outcome Variable (average postest effects)

Social Skills Rating System: Teacher
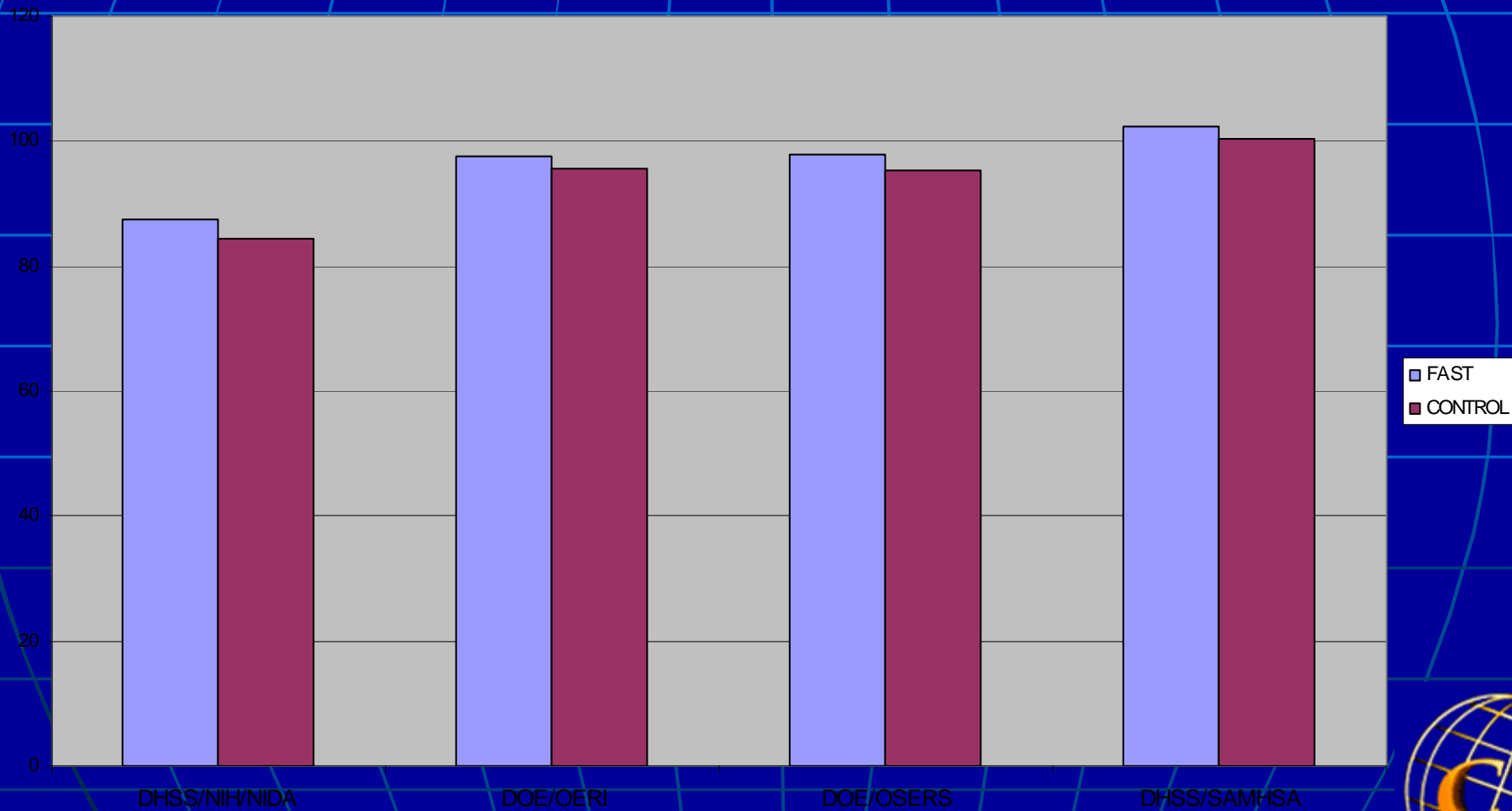
Outcome Variable (average postest effects)

Social Skills Rating System: Parent
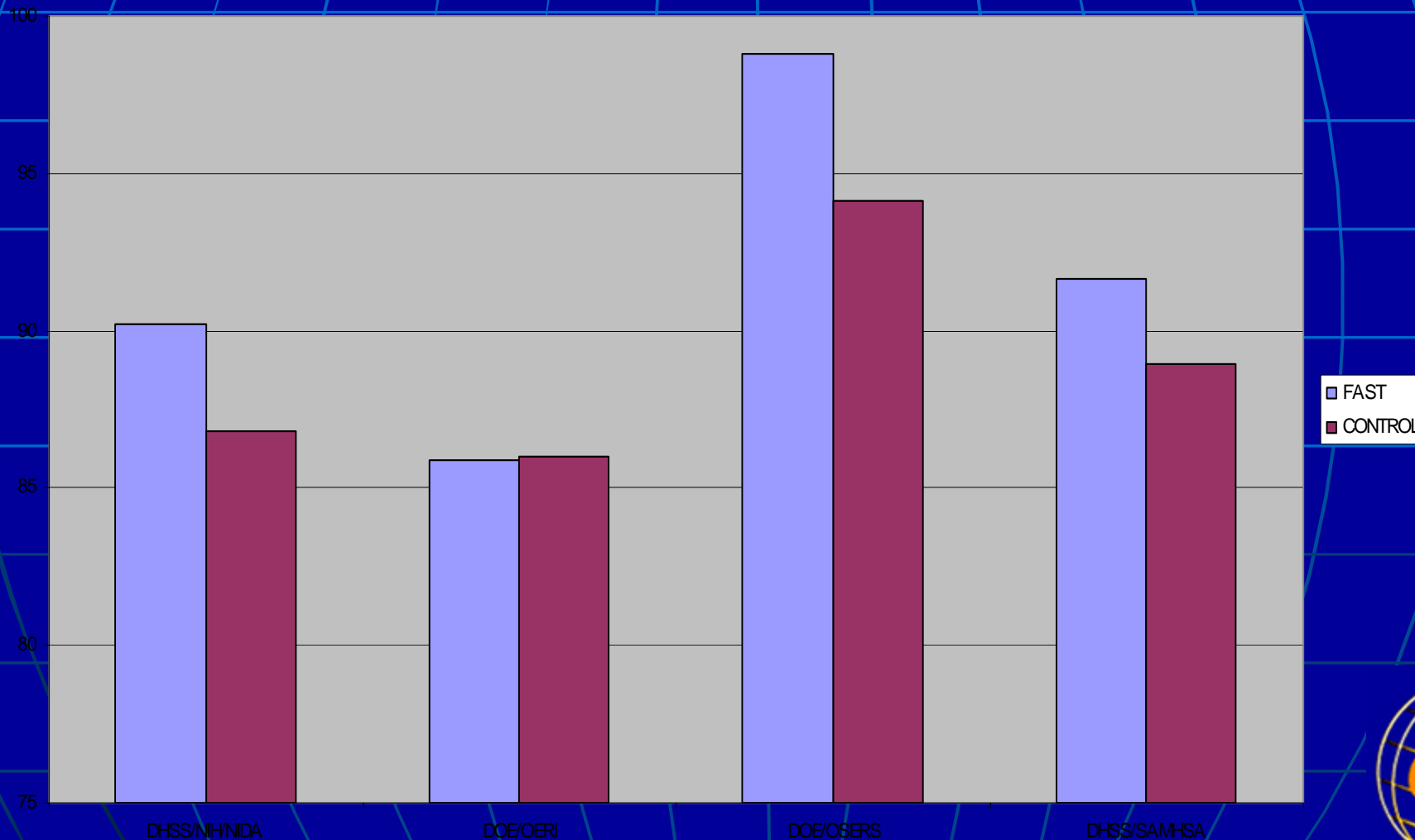
Outcome Variable
Abt Research Associates (African-American)
Subscales Effect Sizes
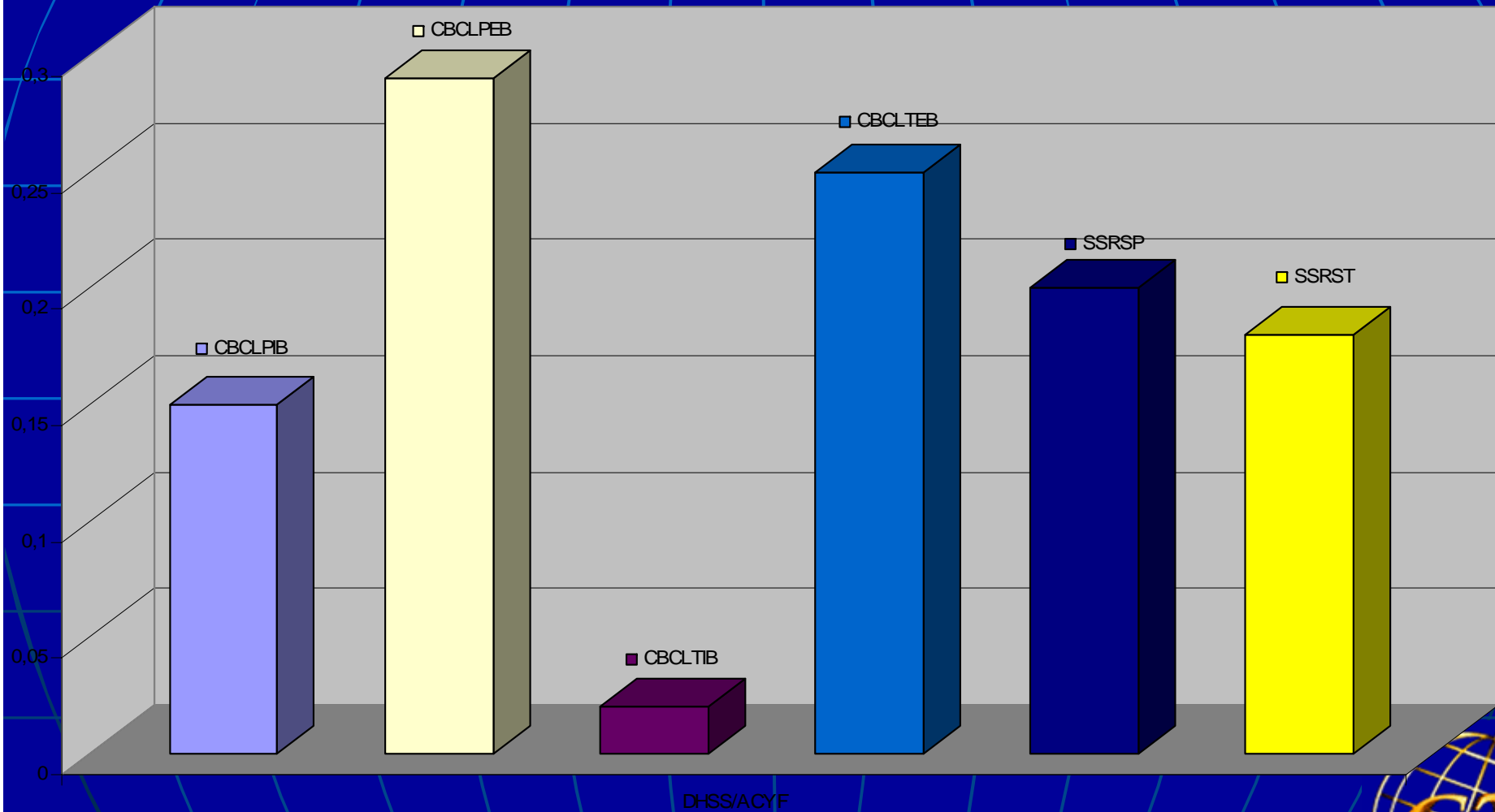
Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)

Comparison: 02 FAST vs Bibliotherapy

Outcome: 01 CBCL externalising scale (parent report)

Study or sub-category	FAST N	Mean (SD)	No treatment N	Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 CBCL (externalising) as rated by parent (one year followup)							
Layzer 2001	207	57.19 (12.40)	200	60.99 (12.89)		49.62	-3.80 [-6.26, -1.34]
Moberg 2002	272	51.20 (13.50)	201	52.10 (13.30)		50.38	-0.90 [-3.34, 1.54]
Subtotal (95% CI)	479		401			100.00	-2.34 [-4.07, -0.61]

Test for heterogeneity: Chi² = 2.69, df = 1 (P = 0.10), I² = 62.9%

Test for overall effect: Z = 2.65 (P = 0.008)

| Total (95% CI) | 479 | | 401 | | | 100.00 | -2.34 [-4.07, -0.61] |

Test for heterogeneity: Chi² = 2.69, df = 1 (P = 0.10), I² = 62.9%

Test for overall effect: Z = 2.65 (P = 0.008)

-10   -5   0   5   10

Favours treatment   Favours control

Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)

Comparison: 02 FAST vs Bibliotherapy

Outcome: 02 CBCL externalising (teacher report)

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 CBCL (externalising) as rated by teacher (one year followup)							
Layzer 2001	207	52.83(14.31)	200	56.49(14.89)		100.00	-3.66 [-6.50, -0.82]
Subtotal (95% CI)	207		200			100.00	-3.66 [-6.50, -0.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.53 (P = 0.01)							
Total (95% CI)	207		200			100.00	-3.66 [-6.50, -0.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.53 (P = 0.01)							

-10   -5   0   5   10

Favours treatment   Favours control

Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)

Comparison: 02 FAST vs Bibliotherapy

Outcome: 03 CBCL internalising (parent report)

Study or sub-category	FAST N	Mean (SD)	Control N	Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 CBCL (internalising) as rated by parent (one year followup)							
Layzer 2001	207	55.94 (12.06)	200	57.84 (11.92)		46.68	-1.90 [-4.23, 0.43]
Moberg 2002	272	51.10 (12.30)	201	51.10 (11.70)		53.32	0.00 [-2.18, 2.18]
Subtotal (95% CI)	479		401			100.00	-0.89 [-2.48, 0.70]

Test for heterogeneity: Chi² = 1.36, df = 1 (P = 0.24), I² = 26.6%

Test for overall effect: Z = 1.09 (P = 0.27)

| Total (95% CI) | 479 | | 401 | | | 100.00 | -0.89 [-2.48, 0.70] |

Test for heterogeneity: Chi² = 1.36, df = 1 (P = 0.24), I² = 26.6%

Test for overall effect: Z = 1.09 (P = 0.27)
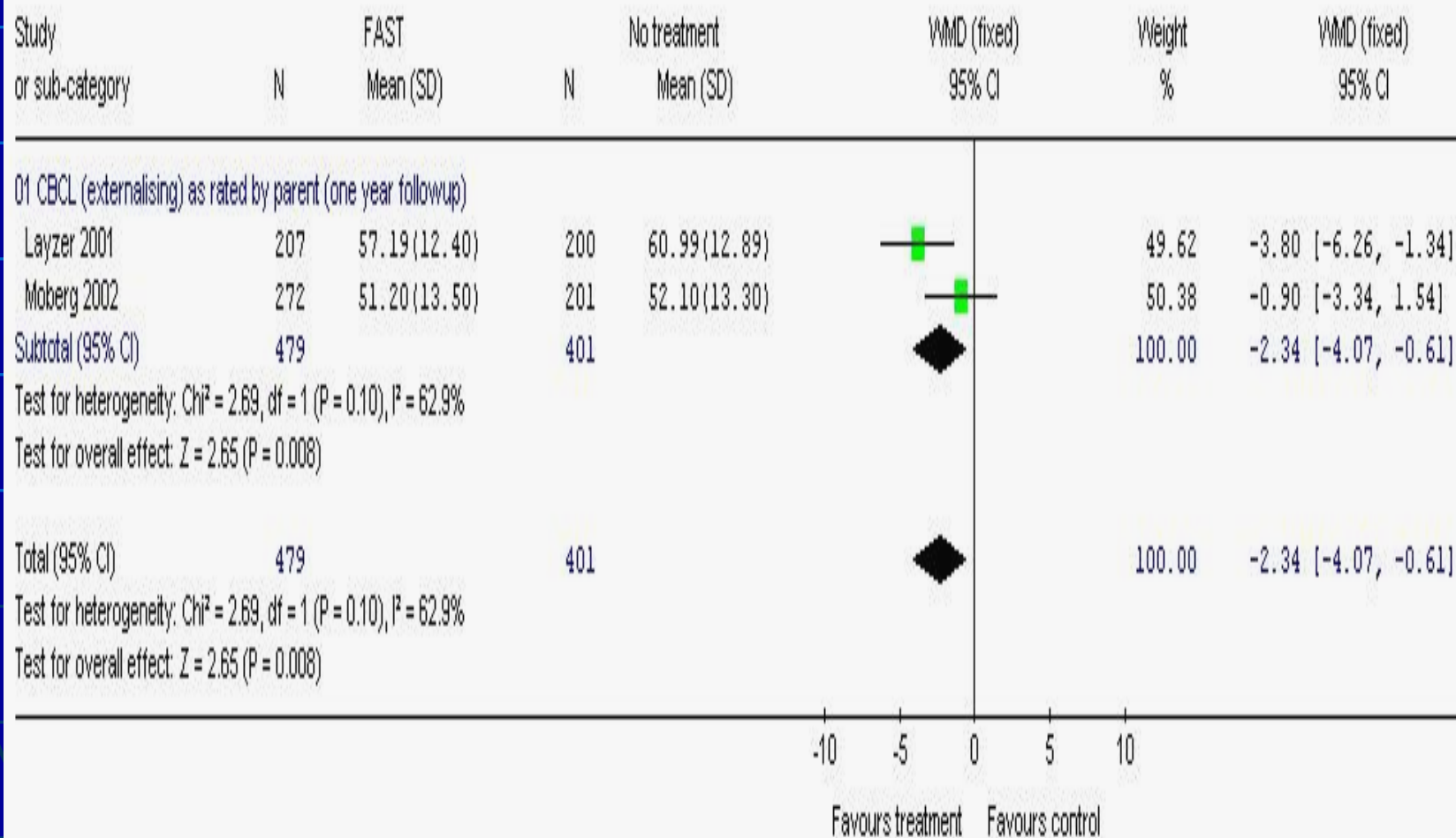
-10   -5   0   5   10

Favours treatment   Favours control

Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)
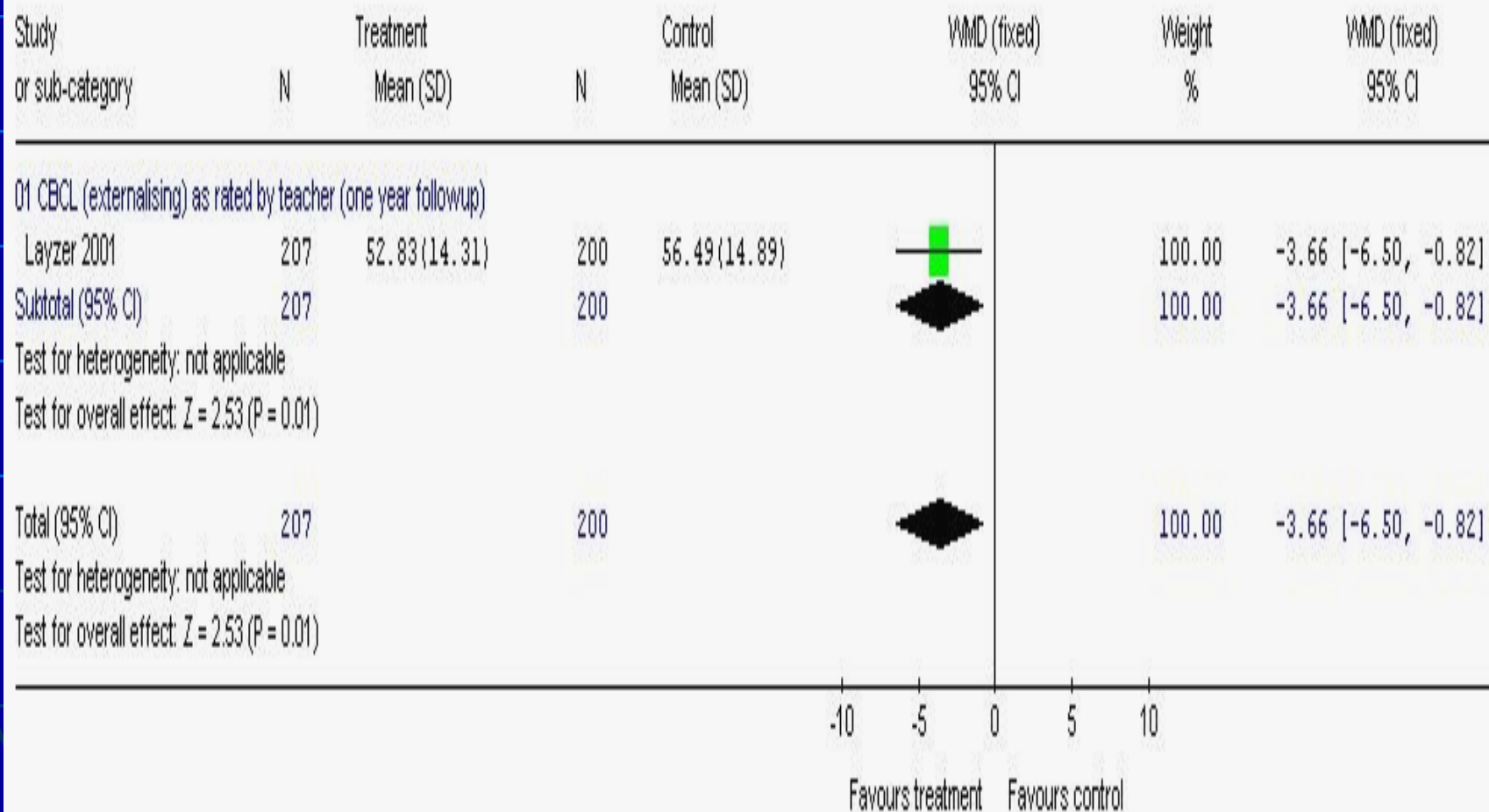
Comparison: 02 FAST vs Bibliotherapy

Outcome: 04 CBCL internalising scale (teacher report)

Study or sub-category	N	FAST Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 CBCL (internalising) as rated by teacher (one year followup)							
Layzer 2001	207	54.22 (14.81)	200	54.63 (15.79)		100.00	-0.41 [-3.39, 2.57]
Subtotal (95% CI)	207		200			100.00	-0.41 [-3.39, 2.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.27 (P = 0.79)							
Total (95% CI)	207		200			100.00	-0.41 [-3.39, 2.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.27 (P = 0.79)							

-10   -5   0   5   10

Favours treatment   Favours control

Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)

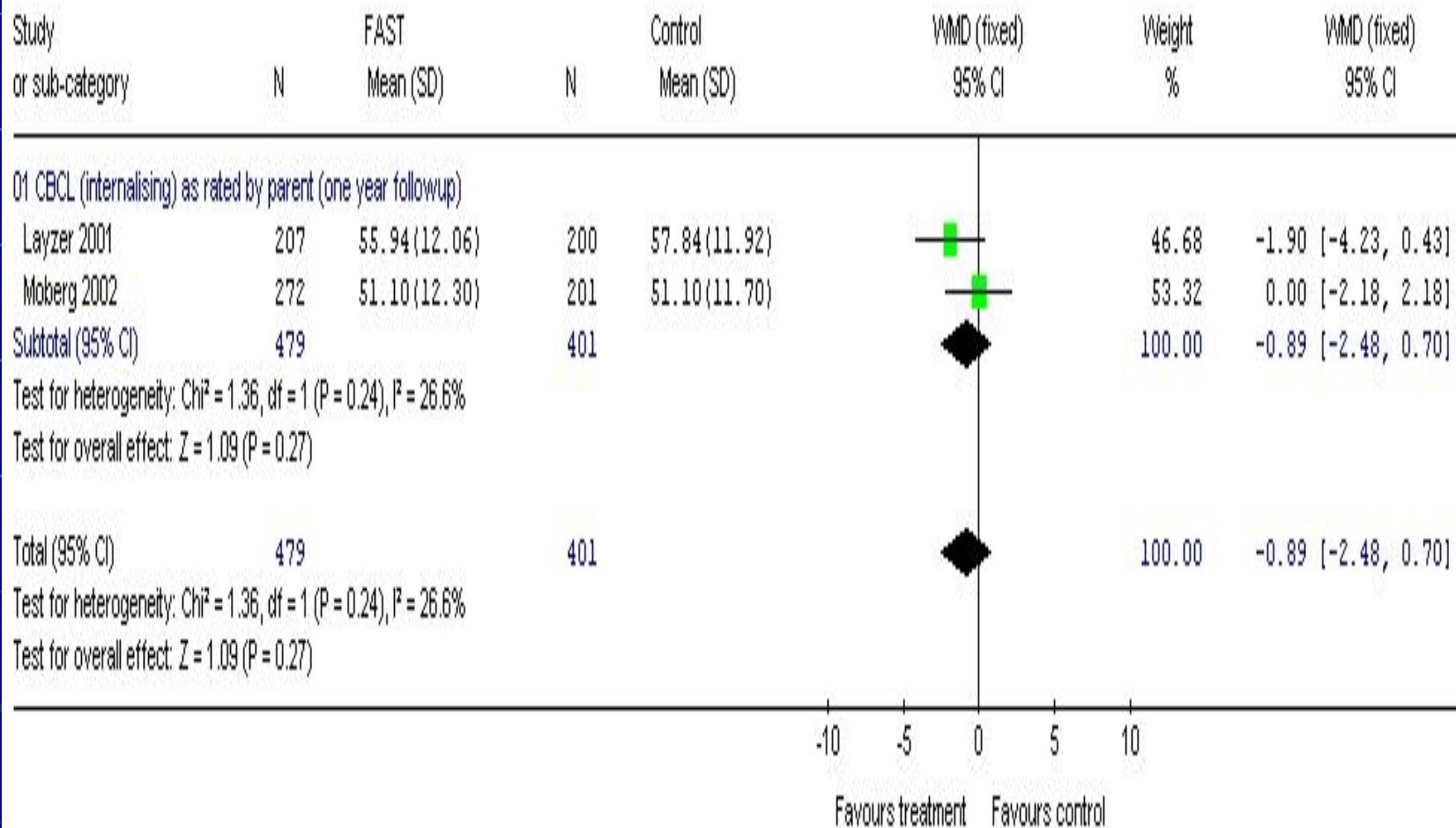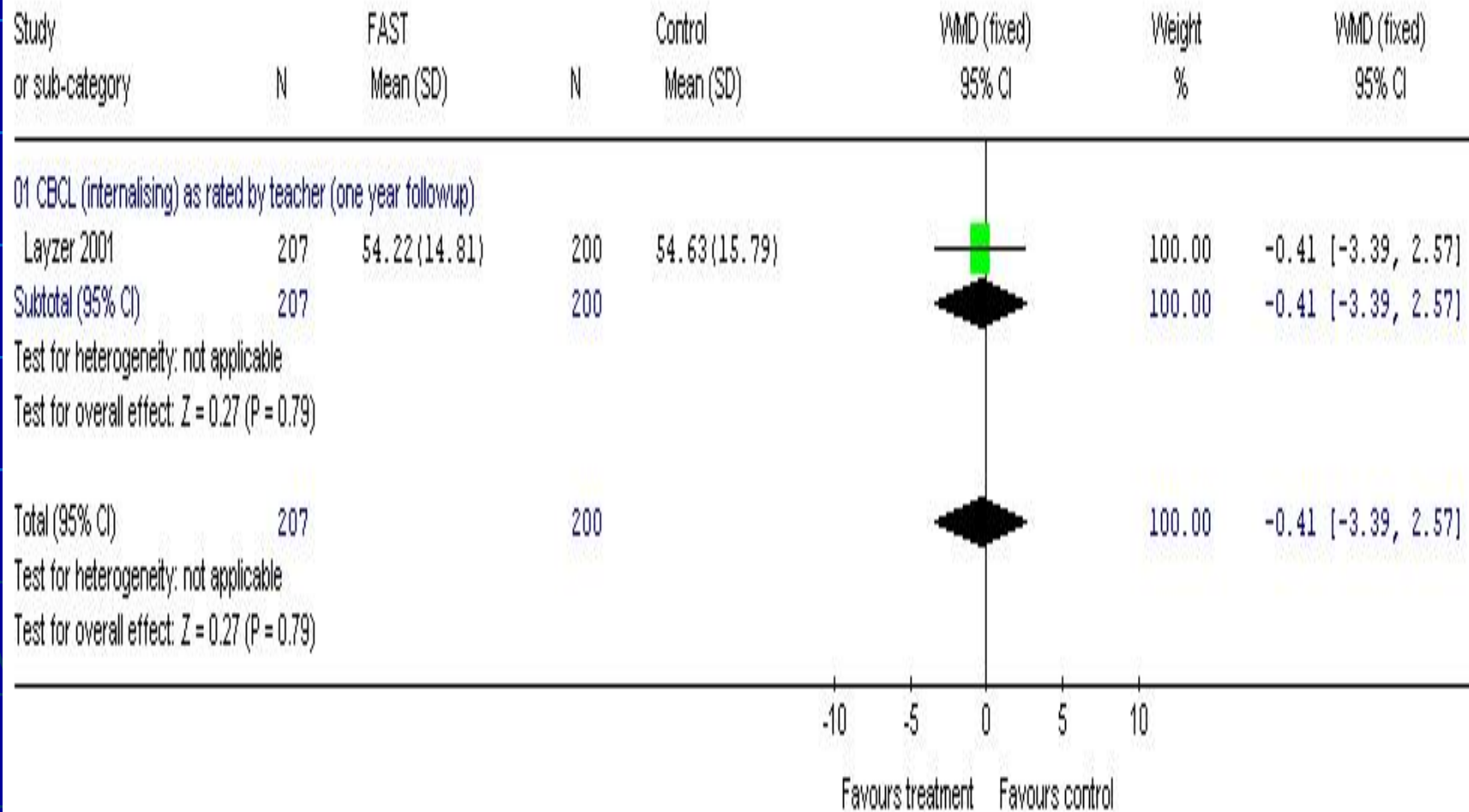Comparison: 02 FAST vs Bibliotherapy

Outcome: 05 SSRS (Child social skills) as rated by parent

Study or sub-category	N	FAST Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Layzer 2001	207	90.22 (16.61)	200	86.80 (16.49)		61.64	3.42 [0.20, 6.64]
Moberg 2002	272	101.60 (21.90)	201	98.10 (22.70)		38.36	3.50 [-0.58, 7.58]
Total (95% CI)	479		401			100.00	3.45 [0.93, 5.98]

Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.98), I² = 0%

Test for overall effect: Z = 2.68 (P = 0.007)

-10   -5   0   5   10

Favours control   Favours FAST

Review: Families and Schools Together (FAST) for improving outcomes of school-aged children and their families (lisbon)
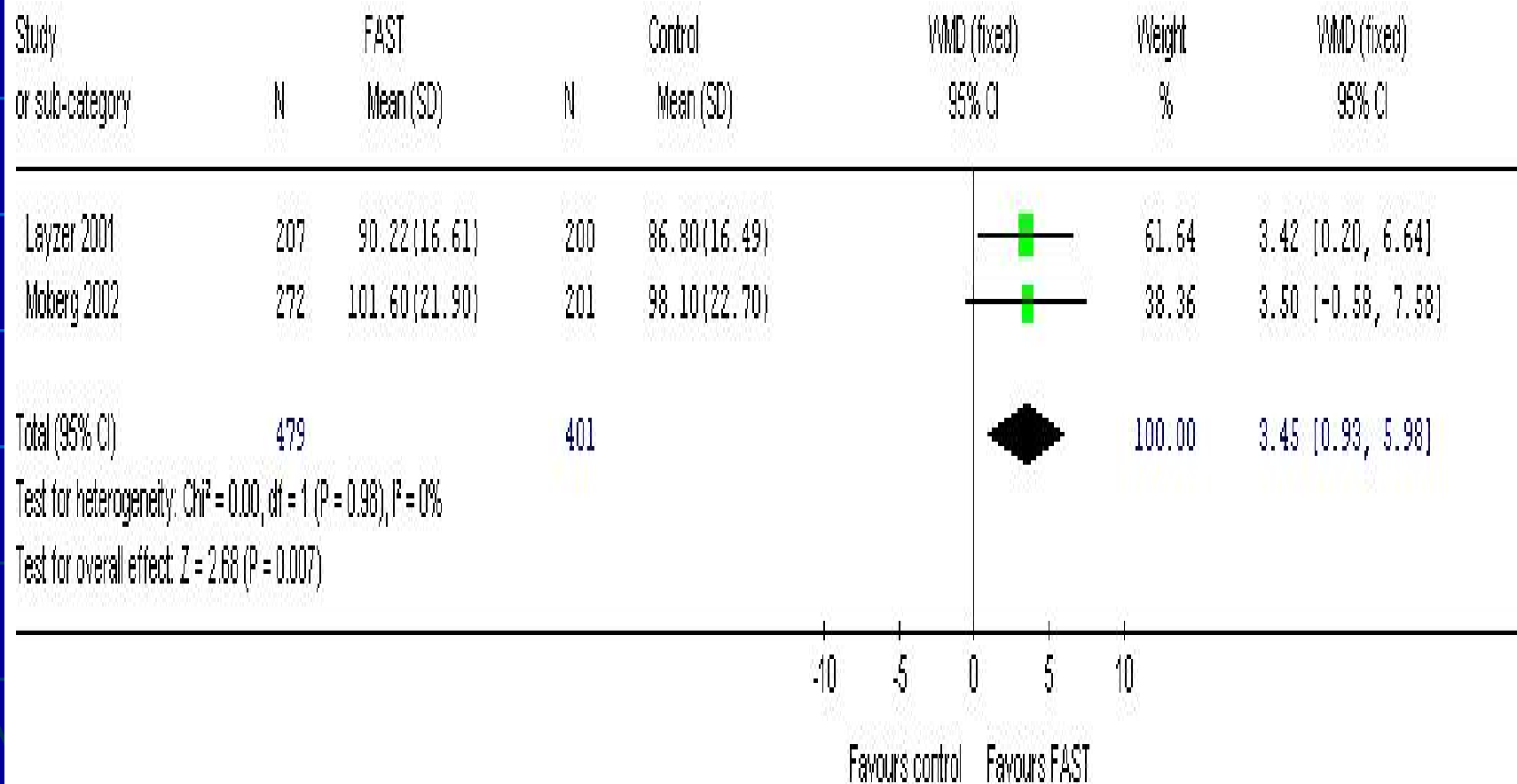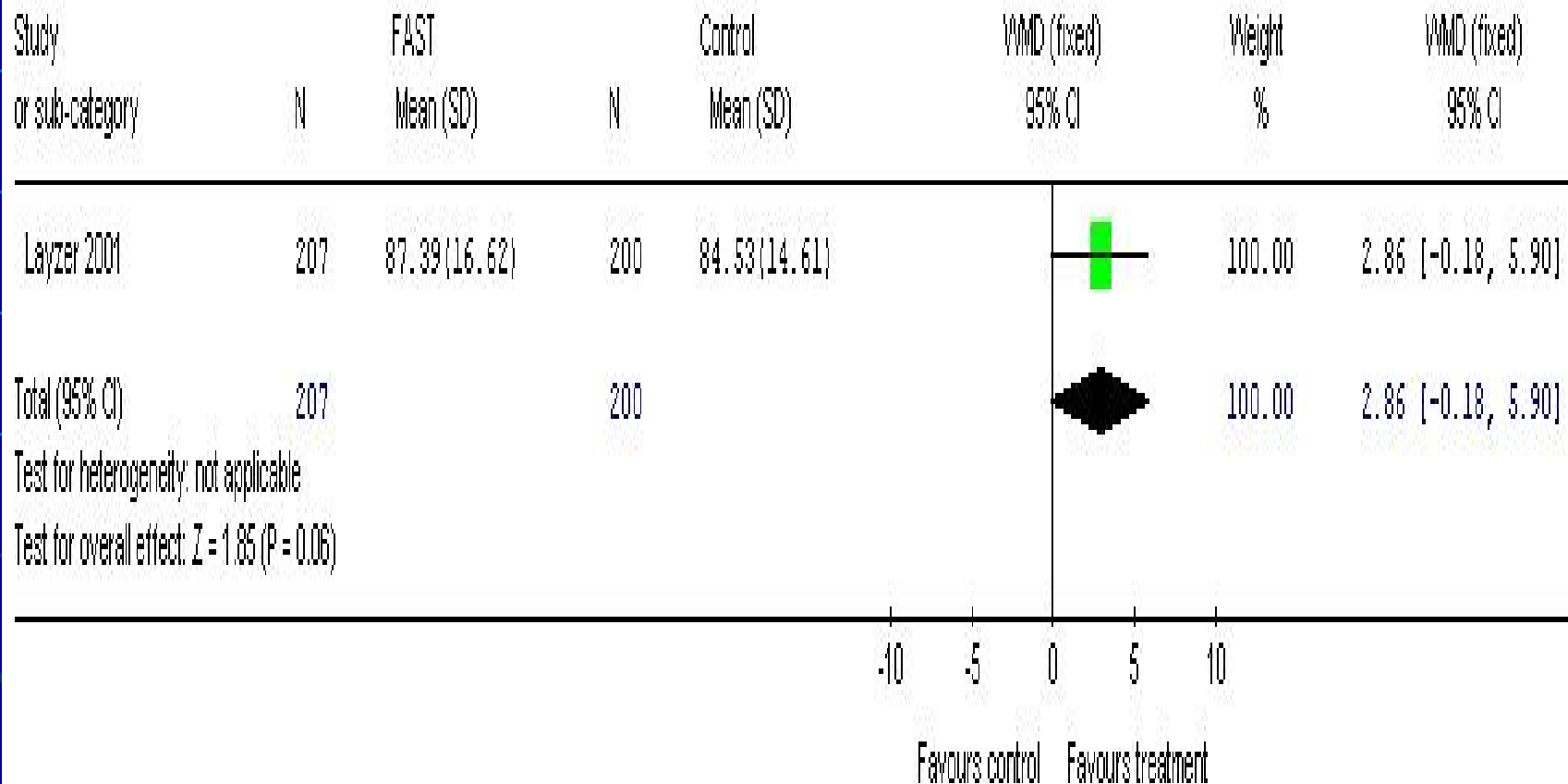
Comparison: 02 FAST vs Bibliotherapy

Outcome: 06 SSRS (Child social skills) as rated by teacher

Study or sub-category	N	FAST Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Layzer 2001	207	87.39 (16.62)	200	84.53 (14.61)		100.00	2.86 [-0.18, 5.90]
Total (95% CI)	207		200			100.00	2.86 [-0.18, 5.90]

Test for heterogeneity: not applicable

Test for overall effect: Z = 1.85 (P = 0.06)

-10 -5 0 5 10

Favours control   Favours treatment

Key Points

- Homogeneous interventions

- High quality methodological characteristics

- Posttest Outcome variables available

- Enhance use of primary data

- Increase reported data

- Include process variables

- Compare results with Non-Randomized studies