

Table 1

Summary of Treatment-outcome Studies Reviewed by Weisz et al. (1994): Mean Effect Size, (SE), and Percentage of Children Improved Following Treatment

Study	Treatment Approach	N	Post-treatment effect size	# and Percentage of children improved at posttreatment	Follow-up effect size	Percentage of children improved at follow-up
CHILDREN (age $M = 7-12$)						
Butler et al. (1980)	Role Play	14	0.63 (0.44)	9 (64%)	Not available	Not available
	Cognitive restructuring	14	0.57 (0.40)	4 (29%)	Not available	Not available
Stark, Reynolds, & Kaslow (1987)	Self-control	9	0.53 (0.40)	7 (78%)	-0.03 (0.68)	88%
	Behavioral problem solving	10	0.41 (0.31)	6 (60%)	-0.55 (1.10)	67%
Liddle & Spence (1990)	Social competence training	11	0.17 (0.25)	Not available	0.24 (0.21)	Not available
ADOLESCENTS (age $M = 12-18$)						
Reynolds & Coats (1986)	Relaxation	9	1.40 (0.53)	6 (75%)	1.34 (0.23)	
	Cognitive-behavioral	11	1.12 (0.71)	5 (83%)	1.10 (0.75)	
Kahn, Kehle, Jenson, & Clark (1990)	Cognitive-behavioral	17	1.11 (0.78)	15 (88%, RADS) 15 (88%, CDI) 13 (76%, BID)	0.94 (0.26)	15 (88%, RADS) 13 (76%, CDI)
	Relaxation	17	0.93 (0.31)	11 (65%, RADS) 13 (76%, CDI) 11 (65%, BID)	0.68 (0.12)	11 (65%, RADS) 11 (65%, CDI)
	Self-modeling	17	0.87 (0.34)	12 (70%, RADS) 10 (59%, CDI) 10 (59%, BID)	0.45 (0.22)	8 (50%, RADS) 7 (44%, CDI)
Lewinsohn et al. (1990)	Coping with depression course (adolescent only)	21	0.43 (0.49)	43% no longer met criteria	Not available	Not available
	Coping with depression course (adolescent and parent)	19	0.77 (0.58)	48% no longer met criteria	Not available	Not available
Pooled averages	(all therapies)			66%		67%

Table 2

Cognitive-Behavioral Theories and Pathogenic Processes of Childhood Depression

Theory		Pathogenic Process
Beck's Cognitive Theory (Beck, 1967)	Negative schemata (Inflexible general rules or irrational ideas) increase child's vulnerability to depression. Distorted processing of information about oneself, others, and the future maintains depressive thinking.	Cognitive Distortion
Learned Helplessness Theory (Seligman, 1975)	Depression results from a history of failure to control negative environmental events. This leads to a generalized perception of negative environmental events as uncontrollable.	Environmental/Skills Deficit Cognitive Distortion
Revised Learned Helplessness Theory (Abramson, Seligman, & Teasdale, 1978)	Depression is the result of internal, stable, and global attributions for negative events.	Cognitive Distortion
Hopelessness Theory (Abramson, Metalsky, & Alloy, 1989)	Depression results from the perception of events as uncontrollable (i.e., child harbors the expectation that highly desired outcomes are unlikely to occur or that highly aversive outcomes are likely to occur) in combination with feelings of helplessness (i.e., child believes that no response in his/her repertoire of behavior will improve the likelihood of a desired outcome).	Cognitive Distortion, Skills Deficit, or Environmental Deficit
Rehm's Self-control Theory (Rehm, 1977)	Depression results from: <ul style="list-style-type: none"> ▪ Deficits in self monitoring ▪ Deficits in self-evaluation ▪ Deficits in self reinforcement Which cause child to attend primarily to negative events, monitor immediate, as opposed to delayed, consequences of his/her behavior, to set stringent self-evaluative criteria, and provide little positive self-reinforcement.	Cognitive Distortion
Social Skills Deficit (Linn & Stark, 1989)	Lack of knowledge and behaviors produces heightened aversive physiological arousal in social situations, and results in negative thoughts which further heighten arousal and discourage the child from interacting.	Skills Deficit Cognitive Distortion
Lewinsohn's Model (Lewinsohn & Shaw, 1969)	Depression results from environmental deficits in which: <ul style="list-style-type: none"> ▪ Events contingent upon the child's behavior are no longer reinforcing ▪ Aversive events occur frequently ▪ Reinforcers are unavailable ▪ The child lacks the necessary social skills for eliciting reinforcing interactions with others ▪ The child does not possess the needed coping skills for terminating the punishing effects of his/her environment 	Environmental Deficit Environmental Deficit Environmental Deficit Skills Deficit Skills Deficit

Table 3

Level of Education and Discipline of Participants

DISCIPLINE	LEVEL OF EDUCATION					TOTAL
	PhD	PsyD	ABD	Intern	No Response	
Clinical Psychology	160	4	4	11	1	180
Psychology	22			1		23
Counseling Psychology	10					10
Educational Psychology	7					7
Clinical/School Psychology	4		1			5
Developmental/ Child Psychology	4					4
School/Clinical/ Developmental Psychology	1					1
Personality Psychology	1					1
Social Psychology	1					1
Experimental Psychology	1					1
Social Sciences	1					1
Social Work	1					1
No Response	2					2
TOTAL	215	4	5	12	1	237

Table 4

Theoretical Orientation of Participants

ORIENTATION	VIGNETTE												TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
Cognitive-Behavioral	16	22	14	14	11	12	9	18	19	15	7	17	174
Behavioral	3	2	2	7	3	4	8	2	4	4	5	2	46
Cognitive						2				1	1		4
Developmental									1				1
Family Systems					1								1
Integrative/Eclectic	1		1	1						1	2		6
Social Learning Theory							1						1
Other	1		1	1									3
No Response				1									1
TOTAL	21	24	19	23	15	18	18	20	24	21	15	19	237

Table 5

Number of Male and Female Participants within each Vignette

Vignette	Men	Women	Total
1	10	11	21
2	15	9	24
3	4	15	19
4	16	7	23
5	5	10	15
6	10	8	18
7	10	8	18
8	8	12	20
9	10	14	24
10	10	11	21
11	9	6	15
12	6	13	19
TOTALS	113	124	237

Table 6

Spearman's rho Correlation Coefficients: Treatment Ratings and Years of Experience

VIGNETTE	TREATMENT					
	Cognitive Treatments		Social Skills Treatments		Environmental Treatments	
	r	p	r	p	r	p
1	.08	.73	-.29	.20	-.37	.10
2	-.32	.13	-.16	.46	-.05	.83
3	-.27	.27	-.11	.66	-.19	.43
4	.38	.08	.03	.88	.14	.53
5	-.01	.98	.30	.28	-.01	.97
6	-.39	.11	-.19	.46	-.32	.20
7	-.22	.38	-.22	.37	.25	.32
8	-.24	.30	.17	.47	.22	.36
9	-.16	.45	-.29	.17	-.22	.30
10	.20	.40	.02	.92	.15	.51
11	.11	.70	.22	.44	-.16	.57
12	.22	.37	.16	.53	.35	.14

Table 7

Spearman's rho Correlation Coefficients: Treatment Ratings and Percentage of Professional Time Devoted to Clinical Work

VIGNETTE	TREATMENT					
	Cognitive Treatments		Social Skills Treatments		Environmental Treatments	
	r	p	r	p	r	p
1	.04	.85	.04	.87	-.28	.22
2	.16	.44	-.06	.78	.36	.08
3	.39	.12	.21	.40	.20	.44
4	-.15	.51	.14	.52	-.21	.33
5	-.06	.84	-.19	.49	.41	.13
6	-.02	.95	-.05	.85	.07	.79
7	-.05	.83	.10	.71	-.18	.48
8	.04	.88	.26	.28	.31	.18
9	.03	.88	.40	.05	.42	.04
10	.31	.17	.19	.40	-.15	.51
11	-.40	.14	-.03	.91	.57	.02
12	-.14	.59	.19	.18	-.37	.13

Significant findings are in bold type.

Table 8

Treatment Rating Means and Standard Deviations by Vignette

VIGNETTE	TREATMENT								
	CR	CM	CSIT	SST	SCT	RST	PT	AS	ERS
	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)	<u>M</u> (SD)
1	3.33 (1.32)	2.67 (.80)	3.19 (1.12)	2.76 (1.04)	2.61 (.86)	2.29 (.90)	4.19 (.87)	3.30 (1.14)	3.52 (1.29)
2	3.83 (1.20)	3.01 (1.10)	3.21 (.88)	2.38 (1.17)	2.83 (1.13)	2.33 (.93)	4.04 (1.20)	3.18 (1.13)	3.00 (1.24)
3	3.84 (1.39)	3.32 (1.25)	3.11 (1.10)	2.58 (1.07)	2.87 (1.15)	2.74 (1.37)	3.27 (1.24)	3.23 (1.03)	2.74 (1.20)
4	4.13 (1.29)	3.52 (1.34)	3.57 (1.12)	2.35 (.94)	2.67 (1.36)	2.09 (.85)	4.17 (1.23)	3.09 (1.16)	3.57 (1.44)
5	4.13 (1.25)	4.13 (1.13)	3.73 (1.39)	1.87 (.83)	3.18 (1.27)	2.20 (1.15)	3.93 (1.22)	3.33 (1.11)	2.93 (1.10)
6	4.83 (.52)	3.62 (1.24)	3.28 (1.32)	3.00 (1.03)	2.77 (1.52)	2.50 (.86)	4.11 (1.08)	3.06 (1.31)	3.00 (1.28)
7	2.61 (1.30)	2.50 (1.25)	2.33 (1.24)	4.50 (.79)	2.83 (1.10)	2.44 (.98)	4.06 (1.06)	2.74 (.84)	4.06 (1.31)
8	3.40 (1.10)	3.11 (1.37)	3.35 (1.27)	4.55 (.95)	2.89 (1.21)	3.10 (1.12)	4.05 (1.00)	3.25 (1.41)	3.08 (1.28)
9	3.88 (1.39)	3.01 (1.14)	2.96 (1.27)	4.50 (.93)	3.03 (1.27)	3.13 (1.39)	3.54 (1.25)	3.07 (1.24)	3.02 (1.15)
10	2.86 (1.28)	2.98 (1.12)	2.57 (1.03)	1.66 (.78)	2.67 (.87)	1.79 (.90)	4.52 (.98)	4.24 (.94)	4.12 (1.00)
11	2.80 (1.21)	2.93 (.70)	3.00 (1.31)	1.67 (1.11)	3.06 (1.49)	2.20 (1.01)	4.93 (1.16)	4.23 (1.40)	4.70 (1.65)
12	3.47 (1.22)	2.91 (.66)	2.95 (1.22)	1.79 (1.13)	2.82 (.76)	2.05 (.97)	4.37 (1.01)	4.16 (1.02)	4.29 (1.02)
GRAND MEANS	3.61 (1.34)	3.13 (1.17)	3.10 (1.21)	2.84 (1.45)	2.84 (1.16)	2.42 (1.10)	4.08 (1.16)	3.39 (1.22)	3.47 (1.36)

Highest treatment rating means are in bold type.

CR. Cognitive Restructuring

CM. Cognitive Modeling

CSIT. Cognitive Self-Instruction Training

SST. Social Skills Training

SCT. Operant-based Self-Control Skills Training

RST. Relaxation Skills Training

PT. Parent Training

AS. Activity Scheduling

ERS. Enriched Reinforcement Settings

Table 9

Treatment Rating Means and Standard Deviations by Pathogenic Process

Pathogenic Process	CR <u>M</u> (SD)	CM <u>M</u> (SD)	CSIT <u>M</u> (SD)	SST <u>M</u> (SD)	SCT <u>M</u> (SD)	RST <u>M</u> (SD)	PT <u>M</u> (SD)	AS <u>M</u> (SD)	ERS <u>M</u> (SD)
Control	3.67 (1.30)	2.99 (1.08)	3.18 (1.02)	2.56 (1.10)	2.77 (1.05)	2.44 (1.07)	3.86 (1.17)	3.24 (1.09)	3.09 (1.27)
Cognitive Distortion	4.35 (1.12)	3.72 (1.26)	3.52 (1.25)	2.43 (1.02)	2.84 (1.38)	2.25 (.94)	4.09 (1.16)	3.14 (1.18)	3.21 (1.32)
Social Skills Deficit	3.36 (1.37)	2.89 (1.26)	2.90 (1.30)	4.52 (.88)	2.93 (1.19)	2.91 (1.22)	3.86 (1.13)	3.04 (1.20)	3.34 (1.30)
Environmental Deficit	3.06 (1.25)	2.94 (.86)	2.82 (1.17)	1.71 (.99)	2.83 (1.04)	1.99 (.96)	4.58 (1.05)	4.21 (1.09)	4.34 (1.21)

Mean Total Scores for Each Treatment Type

	Cognitive Treatments <u>M</u> (SD)	Social Skills Treatments <u>M</u> (SD)	Environmental Treatments <u>M</u> (SD)
Control	9.83 (2.36)	7.77 (2.24)	10.19 (2.27)
Cognitive Distortion	11.59 (2.71)	7.53 (2.27)	10.45 (2.48)
Social Skills Deficit	9.15 (3.16)	10.36 (1.91)	10.23 (2.05)
Environmental Deficit	8.82 (2.20)	6.52 (2.12)	13.13 (2.45)

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Table 10

Treatment Rating Means by Age

AGE	CR <u>M</u> (SD)	CM <u>M</u> (SD)	CSIT <u>M</u> (SD)	SST <u>M</u> (SD)	SCT <u>M</u> (SD)	RST <u>M</u> (SD)	PT <u>M</u> (SD)	AS <u>M</u> (SD)	ERS <u>M</u> (SD)
6	3.28 (1.40)	2.95 (1.20)	2.95 (1.21)	2.74 (1.34)	2.69 (1.06)	2.14 (.92)	4.24 (1.04)	3.36 (1.16)	3.80 (1.28)
10	3.57 (1.25)	3.25 (1.19)	3.31 (1.19)	2.72 (1.54)	2.97 (1.24)	2.49 (1.09)	4.20 (1.18)	3.44 (1.30)	3.35 (1.46)
14	3.99 (1.28)	3.20 (1.11)	3.07 (1.22)	3.06 (1.45)	2.88 (1.19)	2.64 (1.24)	3.80 (1.22)	3.37 (1.22)	3.25 (1.29)

Mean Total Scores for Each Treatment Type

	Cognitive Treatments	Social Skills Treatments	Environmental Treatments
6	9.18 (2.94)	7.57 (2.27)	11.40 (2.45)
10	10.13 (2.83)	8.18 (2.66)	11.00 (2.87)
14	10.24 (2.60)	8.58 (2.68)	10.42 (2.39)

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Table 11

Summary of Analysis of Variance (ANOVA) Results

Source	DV	df	F	p
Pathogenic Process	CR	3, 225	11.99	<.01
	CM	3, 225	7.51	<.01
	CSIT	3, 225	4.00	<.01
	SST	3, 225	86.86	<.01
	SCT	3, 225	.17	.92
	RST	3, 225	7.18	<.01
	PT	3, 225	5.70	<.01
	AS	3, 225	12.17	<.01
	ERS	3, 225	12.44	<.01
Age	CR	2, 225	8.04	<.01
	CM	2, 225	2.42	.09
	CSIT	2, 225	2.29	.10
	SST	2, 225	2.37	.10
	SCT	2, 225	1.24	.29
	RST	2, 225	3.90	.02
	PT	2, 225	3.61	.03
	AS	2, 225	.37	.69
	ERS	2, 225	4.18	.02
Pathogenic Process X Age	CR	6, 225	.80	.57
	CM	6, 225	.80	.57
	CSIT	6, 225	.97	.45
	SST	6, 225	1.46	.19
	SCT	6, 225	.24	.96
	RST	6, 225	.50	.81
	PT	6, 225	.98	.44
	AS	6, 225	.34	.92
	ERS	6, 225	1.54	.17

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Table 12

Pairwise Comparisons of Treatment Means: Control vs. Treatment Vignettes

DV	Pathogenic Process (i)	Pathogenic Process (j)	$\underline{M}_i - \underline{M}_j$	Standard Error	p
COGNITIVE TREATMENTS					
Total Scores	Control	Cognitive Distortion	-1.76	.48	<.01
		Social Skills Deficit	.68	.46	.45
		Environmental Deficit	1.02	.48	.14
CR	Control	Cognitive Distortion	-.69	.23	.01
		Social Skills Deficit	.32	.22	.47
		Environmental Deficit	.62	.23	.03
CM	Control	Cognitive Distortion	-.73	.21	<.01
		Social Skills Deficit	.01	.20	.96
		Environmental Deficit	.01	.21	1.00
CSIT	Control	Cognitive Distortion	-.35	.22	.38
		Social Skills Deficit	.27	.21	.57
		Environmental Deficit	.36	.22	.36
SOCIAL SKILLS TREATMENTS					
Total Scores	Control	Cognitive Distortion	.23	.39	.93
		Social Skills Deficit	-2.60	.38	<.01
		Environmental Deficit	1.24	.39	<.01
SST	Control	Cognitive Distortion	.13	.18	.89
		Social Skills Deficit	-1.96	.18	<.01
		Environmental Deficit	.85	.18	<.01
SCT	Control	Cognitive Distortion	-.01	.22	.99
		Social Skills Deficit	-.16	.21	.88
		Environmental Deficit	-.06	.22	.99
RST	Control	Cognitive Distortion	.19	.19	.77
		Social Skills Deficit	-.48	.19	.05
		Environmental Deficit	.45	.19	.10
ENVIRONMENTAL TREATMENTS					
Total Scores	Control	Cognitive Distortion	-.25	.42	.93
		Social Skills Deficit	-.04	.41	1.00
		Environmental Deficit	-2.93	.42	<.01
PT	Control	Cognitive Distortion	-.23	.20	.68
		Social Skills Deficit	.01	.20	1.00
		Environmental Deficit	-.72	.21	<.01
AS	Control	Cognitive Distortion	.09	.21	.97
		Social Skills Deficit	.20	.21	.76
		Environmental Deficit	-.97	.21	<.01
ERS	Control	Cognitive Distortion	-.12	.23	.95
		Social Skills Deficit	-.25	.22	.69
		Environmental Deficit	-1.24	.23	<.01

Significant findings are in bold type.

$\underline{M}_i - \underline{M}_j$ = Difference between means.

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ERS. Enriched Reinforcement Settings

Table 13

Pairwise Comparisons for Treatment Means within Treatment Vignettes

DV	Pathogenic Process (i)	Pathogenic Process (j)	$\underline{M}_i - \underline{M}_j$	Standard Error	p
COGNITIVE TREATMENTS					
Total Scores	Cognitive Distortion	Social Skills Deficit	2.44	.48	<.01
		Environmental Deficit	2.78	.49	<.01
CR	Cognitive Distortion	Social Skills Deficit	1.00	.23	<.01
		Environmental Deficit	1.30	.23	<.01
CM	Cognitive Distortion	Social Skills Deficit	.82	.21	<.01
		Environmental Deficit	.77	.21	<.01
CSIT	Cognitive Distortion	Social Skills Deficit	.62	.22	.02
		Environmental Deficit	.70	.23	<.01
SOCIAL SKILLS TREATMENTS					
Total Scores	Social Skills Deficit	Cognitive Distortion	2.83	.40	<.01
		Environmental Deficit	3.84	.40	<.01
SST	Social Skills Deficit	Cognitive Distortion	2.09	.18	<.01
		Environmental Deficit	2.81	.18	<.01
SCT	Social Skills Deficit	Cognitive Distortion	.09	.22	.98
		Environmental Deficit	.10	.22	.98
RST	Social Skills Deficit	Cognitive Distortion	.67	.19	<.01
		Environmental Deficit	.93	.20	<.01
ENVIRONMENTAL TREATMENTS					
Total Scores	Environmental Deficit	Cognitive Distortion	2.68	.43	<.01
		Social Skills Deficit	2.90	.42	<.01
PT	Environmental Deficit	Cognitive Distortion	.49	.21	.09
		Social Skills Deficit	.73	.21	<.01
AS	Environmental Deficit	Cognitive Distortion	1.06	.22	<.01
		Social Skills Deficit	1.17	.21	<.01
ERS	Environmental Deficit	Cognitive Distortion	1.12	.24	<.01
		Social Skills Deficit	1.00	.23	<.01

Significant findings are in bold type.

$\underline{M}_i - \underline{M}_j$ = Difference between means.

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Table 14

Pairwise Comparisons of Treatment Means within Age

DV	Age (i)	Age (j)	$\underline{M}_i - \underline{M}_j$	Standard Error	p
COGNITIVE TREATMENTS					
Total Scores	14	6	1.07	.41	.02
		10	.12	.42	.97
CR	14	6	.71	.19	<.01
		10	.42	.20	.09
CM	14	6	.25	.18	.34
		10	-.05	.18	.96
CSIT	14	6	.11	.19	.82
		10	-.25	.19	.40
SOCIAL SKILLS TREATMENTS					
Total Scores	10	6	.61	.34	.18
		14	-.40	.35	.48
SST	10	6	<-.01	.16	.98
		14	-.35	.16	.08
SCT	10	6	.28	.19	.31
		14	.08	.19	.90
RST	10	6	.35	.17	.10
		14	-.15	.17	.64
ENVIRONMENTAL TREATMENTS					
Total Scores	6	10	.40	.37	.51
		14	.99	.36	.02
PT	6	10	.04	.18	.98
		14	.44	.18	.03
AS	6	10	-.08	.19	.89
		14	-.01	.18	1.00
ERS	6	10	.45	.20	.06
		14	.55	.20	.01

Significant findings are in bold type.

$\underline{M}_i - \underline{M}_j$ = Absolute value of difference between means.

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