

The Efficacy of Systemic Therapy With Adult Patients: A Meta-Content Analysis of 38 Randomized Controlled Trials

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Systemic therapy is a widely used psychotherapy approach. Yet there exist few systematic reviews on its efficacy. A meta-content analysis was performed to analyze the efficacy of systemic therapy for the treatment of mental disorders in adulthood. All randomized (or matched) controlled trials (RCT) evaluating systemic/systems oriented therapy in various settings (family, couple, individual, group, multifamily group therapy) with adult index patients suffering from mental disorders were identified by database searches and cross-references in other reviews. Inclusion criteria were: index patient diagnosed with a DSM or ICD listed mental disorder, trial published in any language up to the end of 2008. The RCTs were content analyzed according to their research methodology, interventions applied, and results. Thirty-eight trials published in English, German, Spanish, and Chinese were identified, 34 of them showing systemic therapy to be efficacious for the treatment of mood disorders, eating disorders,

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We thank many colleagues for their support: Claudia Borgers and Pia Weber (former graduate students of the first author at the Universität Duisburg-Essen), Jan Lauter, Joachim von Twardowski, and Jia Xu (Doctoral students from the University of Heidelberg), and Gu Min Min (Ph.D. student, Hongkong) for their help in identifying and collecting relevant studies; Shi Jingyu (Shanghai/Heidelberg) for her translations of Chinese publications; Annette Bornhäuser (Heidelberg) for her help in proofreading the manuscript version; and the following researchers from Belgium (Gilbert Lemmens), China (Zhao Xu Dhong), Finland (Paul Knekt), Germany (Andreas Gantner, Wilhelm Rotthaus, Helmut Saile, Arist von Schlippe, Michael Scholz, Helm Stierlin, Michael Wirsching), Hong Kong (Joyce Ma), Italy (Piero De Giacomo), Singapore (Thimothy Sim), Sweden (Ulf Malm), Switzerland (Luc Ciompi), the UK (Eia Asen, Ivan Eisler, Peter Stratton), the USA (Christopher Beevers, Jack Cockburn, D. Russell Crane, Michael Dennis, Guy Diamond, Peter Fraenkel, Scott Henggeler, Mitchell P. Karno, Judith Landau, Howard Liddle, Ivan W. Miller, William L. Pinsof, Jose Sczapocznik, Lyman Wynne, Allan Zweben); as well as all those who we forgot to mention.

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substance use disorders, mental and social factors related to medical conditions and physical disorders, and schizophrenia. Systemic therapy may also be efficacious for anxiety disorders. Results were stable across follow-up periods of up to 5 years. There is a sound evidence-base for the efficacy of systemic therapy for adult index patients with mental disorders in at least five diagnostic groups.

Keywords: Systemic Therapy; Systems Oriented Family Therapy; Couples Therapy; Family Therapy; Multifamily Group Therapy; Individual Therapy; Randomized-Controlled Trial (RCT); Efficacy; Therapy Research

Fam Proc 49:457–485, 2010

While there exist many reviews on the efficacy of cognitive behavior therapy (CBT; e.g., Shadish & Baldwin, 2005) or psychodynamic therapy (e.g., Leichsenring & Rabung, 2008), one hardly finds reviews of *systemic* therapy although it is one of the most widespread therapy orientations (Orlinsky & Ronnestad, 2005). The few reviews about the efficacy of systemic therapy for adult mental disorders are restricted to Anglo-Saxon trials published in English (Carr, 2009; Stratton, 2005).

Most reviews that contain studies of systemic therapy focus on therapy *settings* (marital/couple and family therapy (MFT/CFT), multiple family groups) rather than on a systems theory orientation. Several papers review trials on the efficacy of CFT in *general* (e.g., Alexander, Sexton, & Robbins, 2002; Asen, 2002; Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998; Carr, 2009; Diamond & Siqueland, 2001; Gollan & Jacobson, 2002; Gottman, Ryan, Carrere, & Erley, 2002; Gurman & Liddle, 2002; Lebow & Gurman, 1995; Liddle & Rowe, 2004; Liddle, Santisteban, Levant, & Bray, 2002; Pinosof & Wynne, 1995; Scheib & Wirsching, 2004; Shadish & Baldwin, 2003; Snyder, Castellani, & Whisman, 2006; Sprenkle, 2002). This focus on couple and family therapy and the failure to distinguish between mode/setting of treatment and theoretical approach has been a major limitation of earlier reviews and meta-analyses. It results in less visibility of systemic therapy within the discourses of evidence based outcome research compared to corresponding behavioral approaches (Sprenkle, 2002). This has implications for its recognition as evidence-based treatment method.

The focus of our work was to conduct a systematic review of all randomized, controlled outcome studies (RCT) on the efficacy of systemic therapy as a theoretical approach for the treatment of DSM/ICD-disorders in adults. A meta-analysis could not be performed due to the high variability of the methodology of the trials we identified. Therefore, we conducted a meta-content analysis (see Sydow, 1999), which systematically collects relevant studies according to a priori defined criteria and presents its results in form of a table with systematic data on study methodology and outcomes. Our review is an update of an earlier German paper, which included trials published until the end of 2004 (Sydow, Beher, Retzlaff, & Schweitzer-Rothers, 2007a; Sydow, Beher, Retzlaff, & Schweitzer-Rothers, 2007b). We analyzed trials published in English as well as in other languages. Studies with child or adolescent index patients are reported in another German review (Sydow, Beher, Schweitzer-Rothers, & Retzlaff, 2006), of which an English update is being prepared.

Like many other researchers (Grawe, Donati, & Bernauer, 1994; Justo, Soares, & Calil, 2007; Kazdin & Weisz, 1998; Orlinsky & Ronnestad, 2005; Shadish et al., 1993), we use “systemic/systems oriented therapy/therapies (ST)” as a general term for a

major therapy orientation that can be distinguished from other main approaches like, for example CBT or psychodynamic therapy. This understanding of “ST” is narrower than that of Carr (2009) and Asen (2002), who both subsume *any* type of couple-/family-based intervention (e.g., CBT) under the term “systemic intervention,” while it is broader than the view that equates “systemic therapy” with Milan style systemic therapy (e.g., Sprenkle, 2005).

Systemic therapy can be defined as a form of psychotherapy that conceives behavior and especially mental symptoms within the context of the social systems people live in, focusing on interpersonal relations and interactions, social constructions of realities, and the recursive causality between symptoms and interactions. Partners/family members and other important persons (e.g., friends, professional helpers) are included directly or virtually in the therapy through systems oriented questions about their behavior and perceptions (Becvar & Becvar, 2009; Sydow et al., 2007a). A number of textbooks describe the theoretical foundations and standard interventions commonly employed in systemic therapy (e.g., Becvar & Becvar, 2009; Retzlaff, 2008; Schweitzer & von Schlippe, 2006; Sydow, 2007; von Schlippe & Schweitzer, 1996).

While MFT/CFT has a large intersection with systemic therapy, these two types of therapies are not identical. The setting CFT is also employed by therapists with a not primarily systemic orientation (e.g., psychodynamic, cognitive behavioral, psychoeducative; see Diamond & Siqueland, 2001; Lebow & Gurman, 1995; Scheib & Wirsching, 2004; Sydow et al., 2007a) and systemic therapy can also be conducted as individual therapy (IT), group therapy (GT), or as multifamily group therapy (MFGT).

METHOD OF THE META-CONTENT ANALYSIS

Identification of the Primary Studies

Trials were identified through database searches and cross-references in reviews, meta-analyses, or other primary studies. Members of the American Academy of Family Therapy and the European Federation of Family Therapy were contacted by e-mail for additional hints.

Searches in databases

We conducted systematic searches of medical and psychological databases (ISI Web of Science, PsycINFO, Psyn dex, Medline, PubMed, and PsiTri) up to the publication data of December 2008 and also included in press publications. Trials on the efficacy of systemic interventions cannot reliably be found under one general label, but often under subform labels (e.g., “structural family therapy,” “solution-focused couple therapy”). While searches for global terms (family/marital/couple therapy/intervention and trial) identify thousands of studies that could not be analyzed with our limited resources, a restriction to “systemic” or “systems oriented” therapy would not have captured many relevant studies that were identified through cross references.

Searches in meta-analyses and Cochrane Reviews

Results of meta-analyses/Cochrane reviews of CFT in general (Dunn & Schwebel, 1995; Grawe et al., 1994; Markus, Lange, & Pettigrew, 1990; Shadish et al., 1993) and the treatment of specific disorders (Barbato & D’Avanzo, 2006; Edwards & Steinglass, 1995; Henken, Huibers, Churchill, Restifo, & Roelofs, 2007; Justo et al., 2007;

Martire, Lustig, Schulz, Miller, & Helgeson, 2004; O'Farrell & Fals-Stewart, 2001; Pharoah, Mari, Rathbone, & Wong, 2006; Stanton & Shadish, 1997) are summarized in the results section. Only the latest, most comprehensive versions of Cochrane Reviews were included.

Review articles

We analyzed all reviews mentioned above, reviews of CFT meta-analyses (Lutz, 2006; Sexton, Robbins, Hollimon, Mease, & Mayorga, 2003; Shadish & Baldwin, 2003) and on empirically validated treatments (Chambless et al., 1998; Fonagy & Roth, 2004a, b) in order to identify relevant primary studies.

Selection of the Trials

Selection criteria with regard to the research methodology applied

All randomized (or matched¹) controlled trials (RCT) on the efficacy of systemic therapies with DSM or ICD diagnosed adult index patients published until the end of 2008 (and in press) in any language were analyzed. We excluded trials that presented results only on relational outcomes (e.g., marital quality).

Selection criteria with regard to the systemic interventions

According to our definition of ST and the criteria applied by other researchers, we operationalized "systemic psychotherapy" as any couple, family, group, multifamily group, or individual focused therapeutic intervention that refers to either one of the following systems-oriented authors (Anderson, Boszormeny-Nagy, de Shazer, Haley, Minuchin, Satir, Selvini-Palazzoli, Stierlin, Watzlawick, White, Zuk) or specified the intervention by use of at least one of the following terms: *systemic*, *structural*, *strategic*, *triadic*, *Milan*, *functional*, *solution focused*, *narrative*, *resource/strength oriented*, *McMaster model* (Cottrell & Boston, 2002; Grawe et al., 1994; Justo et al., 2007; Kazdin & Weisz, 1998; Shadish et al., 1993). We only included trials with at least one predominantly systemic intervention. Trials on predominantly cognitive-behavioral, psychodynamic, or psychoeducative interventions in any setting were excluded. The systemic interventions are marked in bold letters in Table 1.

The final sample of the analyzed RCT studies

We identified 38 trials (the Helsinki Psychotherapy Study was counted twice because it was analyzed separately for affective and anxiety disorders), including 12 new trials not included in our first German review (Sydow et al., 2007b). We excluded eight studies from our first review because we now applied even stricter inclusion criteria. We could only identify trials published in English, German, Spanish, and Mandarin.

RESULTS

First, we summarize results of meta-analyses across diagnostic groups, then results of meta-analyses and primary studies for specific disorders. Table 1 provides an overview of the methodology and results for each single trial we analyzed. The trials are arranged by diagnostic groups and by date of publication. Table 2 provides a

¹Because the samples were matched instead of randomized in only two of 38 trials (Table 1), we refer to the whole lot as "randomized" studies.

TABLE 1 (Contd.)

Authors and year	Sample (N:IP)				Interventions				Study design				Evaluation	
	Country	R Treated	pt	Age	Sex	Number of sessions	Duration (weeks)	Treatment and control groups researched	ITT analyses	Manual integrity	CT.	Results at the end of intervention (posttest)		Follow-up results
Miller et al. (2005)	U.S.A.	x	24	18-65	82%	26	26	Psychiatric outpatients 1. Pharmacotherapy 2. Pharmacotherapy + Problem-centered Systems FT 3. Pharmacotherapy + CBT IT 4. Pharma + Probl.-cent. Syst. FT + CBT DSM-III-R MDD and BDI > 17 Outpatient therapy After discharge from psychiatric hospitalization	X	(x)	—	Success weak in all groups: remission 16%; improvement: 29%; Matching of intervention and problem (cogn. distortion, fam. impairment) improved outcome slightly; FT vs. no FT improved outcome substantially (depr. symptoms, suicidal ideation, remission, improvement, less treatment failures). CBT vs. no CBT: no effect on symptoms, suicidal ideation, improvement, remission	—	+
		x	21			(-10) + 5(-10)				(x)	—			
			21			(-10) + 13(-24)				(x) X	—			
			26			(-10) + 5 + 13				(x) X	—			
Fabbri et al. (2007)	Italy	x	10	47	60%	6(-12)	12 +	1. FT (McMaster Model) + Pharmacotherapy (maintenance) 2. Pharmacotherapy alone (dose increase) Outpatients with recurrent MDD, living with a partner, who relapsed while taking antidepressive drugs	—	(x)	—	12 months: Treatment responders (CID—blind psychiatrists' rating): 1 (70%) = 2 (70%) vs. 2 (14%) < 2 (86%)	+	
			10			(20)								
Lemmens et al. (2009)	Belgium	x	35	18-64	64-	7	6 months	1. Multifamily group therapy (systemic) + TAU (inpatient treatment)	—	—	—	15 months: Treatment responders 1 (23%) = 2 (20%) = 3 (18%); Remission: 1 (20%) = 2 (16%) = 3 (13%)	+?	

(28%) = 3 (17%);
 Antide-
 pressants: 1
 (74%) < 2
 (84%) < 3 (100%)

	25	7	6 months	2. Single systemic FT + TAU (inpatient)	X		
Bipolar disorders (1 RCT)							
Miller et al. (2004); U.S.A.	33	12	n.i.	1. Problem-centered Systems FT (Mc-Master Model) + pharmacotherapy	x	—	Recovered by month 28; 2 (70%) =
Miller et al. (2008); U.S.A.	39	57%					
Solomon et al. (2008)	24 (18–65)	6	n.i.	2. Multifamily group therapy + pharmacotherapy	x	—	3 (65%) = 1 (48%); time to recovery: 2 (Median 7 months) = 3 (8 months) = 1 (10 months)
	23	-	n.i.	3. Pharmacotherapy alone	-	—	Recurrence by month 28; 1 = 2 = 3
	(92)			DSM-III-R acute bipolar disorder (type I)			Hospitalized by month 28; 2 (5%) < 1 (31%) = 3 (38%)
2. Anxiety disorders (DSM-IV; ICD-10: F40-42) (2 RCT)							
Wiltzski et al. (2004)	47	23.4(-30)	n.i.	1. Combined resource-focused IT	x	(x)	Therapy drop out: 1 (4%) < 2 (19%); phobic symptoms: 1 < 2; Other psychiatric impairment: 1 < 2
	29	24.6(-30)	n.i.	2. CBT IT	x	(x)	1-year-follow-up: Anxiety (SCL-90-GSI): 1 = 2 = 3
	(83)			Social phobia (DSM-IV)			
Knekt and Lindfors (2004); Knekt et al. (2008a, b)	93	10-12	24-32	1. Solution-Focused IT	—	—	3-years: Anxiety reduction 1 = 2 < 3;
	98	15-20	30	2. Short-term Psychodynamic IT	—	—	Remission from respective diagnoses: 1 = 2
	99	ca. 300?	- 3 J.	3. Long-term Psychodynamic IT	—	—	
	(294)			DSM-IV mood (86%), anxiety (48%), Personality disorders (PS; 18%) Psychiatric outpatients			
3. Somatoform disorders (DSM-IV; ICD-10: F44) (1 RCT)							
Ataoglu (2003)	15	n.i.	6	1. Paradox intervention (IT)	—	—	Conversion symptoms 1 < 2;
	15			not applicable	—	—	

TABLE 1 (Contd.)

Authors and year	Sample (N-IP)			Interventions			Study design			Follow-up results	Evaluation				
	Country	R Treated	pt	Age	Sex	Number of sessions	Duration (weeks)	Treatment and control groups	Type of disorder researched			ITT-analyses	Manual integrity	CT-Results at the end of intervention (posttest)	Anxiety-scores: 1 < 2
4. Eating disorders: Anorexia nervosa and Bulimia nervosa (DSM-IV; ICD-10; F50) (4 RCT) Crisp et al. (1991); Gowers et al. (1994)	U.K.	x 30	18	22	n.i.	?? + 12	6	2. Medication (Diazepam) (IT) DSM-IV conversion disorder (pseudoseizure)	X	—	—	1-year-follow-up: Weight, BMI: 2 > 4; Clinical improvement was maintained	2-year-follow-up: Weight, BMI: 2 > 4; Clinical improvement was maintained	+	
Dare et al. (2001)	U.K.	x 21	12	26.3	98%	24.9	52	3. Outpatient group therapy (IP/parents) 4. No treatment DSM-III-R Anorexia Nervosa 1. Focal psychoanalytic psychotherapy (IT) 2. Maudsley Approach FT/CT (IT)	X	—	—	Menstruation: 1, 2 > 3 > 4; nutrition: 1, 2 > 3 > 4	After 1 year: All groups improved; Weight gain: 1, 2 > 4; clin. outcome: Recovered/significantly improved 1, 2 > 4 All groups: weak outcome Drop out: 1 = 2 = 3 = 4.	—	+
Espina Elizaguire et al. (2000, 2002)	Spain	x 44	42	20.3	100%	26.2	1 J.	1. Systemic FT (Maudsley, Minuchin, etc.) 2. Parent support group + IP-GT DSM-IV eating disorders	—	—	—	Symptoms: 1 < 2; Bulimic symptoms: 1 < 2 Reduction of depression + anxiety: 1 = 2	12-weeks postintervention: Weight gain: 1 > 2;	—	+
Li et al. (2006)	China	x 21	(62)	40	57%	6	12 w.	1. Structural FT + Citalopram 2. Citalopram alone	—	—	—	Weight gain: 1 > 2; Medication compliance: 1 > 2	2-year-follow-up: relapse rate: 1 < 2	—	+
5. Psychosocial factors related to medical conditions and physical disorders (DSM-IV; Axis III; ICD-10; F54) (6 RCT) Cancer Wirsching et al. (1989)	Germany	x ² 58	57	57	18%	5.9	2 years	CCMD-3 anorexia nervosa 1. Systems Consultation: FT, IT, involvement of med. practitioners, too	—	—	—	Social support of family related to	5-years: Survival rate (in months): Nonsmall cell bronchial CA	—	+

TABLE 1 (Contd.)

Authors and year	Sample (N-IP)				Interventions			Study design			Follow-up results	Evaluation	
	Country	R Treated	pt	Age	Sex	Duration (weeks)	Number of sessions	Treatment and control groups Type of disorder researched	ITT. analyses	Manual integrity			CT. Results at the end of intervention (posttest)
Stanton et al. (1982)		25				26		2. Unpaid structural-strat. FT + methadone	fatalities included			Illegal drug abstinence: 1, 2 > 3, 4, 31 months; mortality: 1, 2 (2%) < 3, 4 (10%); Quantity Alcohol: 1 (655 ounces) = 2 (667) = 3 (886) = 4 (816) 18 months postintervention: Heroin Abstinence/ consumption only once per month: 1 (64%) = 2 (46%); din. improvement (drugs, social): 1 (40%) = 2 (22%)	+
Romijn et al. (1990)	NL	81	73	24	24%	n.i.	n.i.	1. Structural-strategic FT + possibly methadone (Stanton & Todd, 1982)	—	(x)	(x)		+ ?
McLellan et al. (1983); Kraft et al. (1997)	U.S.A.	31	x	42.5	15%	32	26	1. Minimum Methadone Services (IC, FT)	—	—	—	Abstinence (opioid, cocaine) after 12 weeks: 3 (81%) > 2 (59%) > 1 (31%); 24 weeks: improved: 3 > 2 > 1; 3 better	+
		36				51.6	26	2. Standard Methadone Services (IC, FT)	—	—	—		
		33				97.8	26	3. Enhanced Methadone Services: IC + Bowen FT + psychiatric consult	—	—	—		
		(100)	(92)		(Counseling)			Opioid and cocaine related disorders (Ø since 11 years!)	With employment status, family relations, effectiveness			3 > 2 > 1; Cost-ratio per abstinent client: 2 (US\$9,804) >	

Yandoli et al. (2002)	U.K.	x	36	28.2	37%	13,7	52	1. Structural-strategic CFT + methadone (Stanton & Todd, 1982)	X	—	—	6 months: drug-free: 1 (22%) > 3 (8%), 2 (5%); free: 1 (15%) > 3 (8%) >	3 (US\$11.818) > 1 (US\$16.485) 12 months: drug-free: 1 (15%) > 3 (8%) >	+
				(18+)				1. Methadone + supportive IC (TAU)	—	—	—	Drug-free days: 1 = 2 < 3	2 (0%); 5-years: mortality: 1 = 2 = 3; (urine analyses incomplete); reduction Of drug consumption associated with Reduction of depression and Improvement of social functions	
			32			18,1	52	2. Methadone + supportive IC (TAU)	—	—	—			
			33			8,9	52	3. Methadone + low contact intervention Daily opioid user (outpatient) + Methadone-Reduction treatment (- 5g/day every 14 days) in 1 + 3, flexible reduction in 2	—	—	—			
			(101)											
Other illegal and mixed substance use disorders (2 RCT)														
Ziegler-Driscoll (1977)	U.S.A.	x	79	49 approx.	12%			1. Structural FT (inexperienced FT trainees) 2. GT for relatives 3. Peer GT Illegal/legal drug: outpatient treatment after 45-60 days of in-patient treatment in drug-free therapeutic community	—	—	—		1-, 2-, 4-6 months: 1 = 2 = 3 (no urine analyses)	+
Smock et al. (2008)	U.S.A.	x	27	19	21%	6		1. Solution focused GT (SFGT)	—	(x)	x	Substance use change: 1 = 2; Depression (BDI) change: 1 = 2 Outcome questionnaire: 1 better than 2	—	+
			29	19		6		2. GT (problem-focused, psychoeducative)	(x)	(x)	x			
			(56)	(38)				Substance abuse (level 1): alcohol, cannabis, cocaine, nicotine						
7. Schizophrenia and other psychotic disorders (DSM-IV; ICD-10; F2) (8 RCT)														
De Giacomo et al. (1997)	Italy	x	19	17	n.i.	10	2.5	1. Systemic FT (Paradox) and Neuroleptika	—	—	—	Drop-outs: 1 < 2	1-year: Both groups improved;	+
			19	12		8.5		2. Neuroleptika	—	—	—		Symptoms (BPRS): 1 < 2; Social activity of IP: 1 > 2	
			(38)	(28)				DSM-III-R Schizophrenia						
	Spain	m	13	26	0%	28,6	12	1. Systemic FT and medication	—	—	—	Symptoms: significant reduction in 1, 2 -		+

Bressi et al. (2008)	Italy	x	20	50 (100)	45 (95)	25%	12	1 year	20-46	2. CG (antipsychotic drugs) CCMD-3/ICD-10 Schizophrenia 1. Syst. FT (Milan) and psychiatric routine treatment 2. Psychiatric standard treatment: Neuroleptic med DSM-IV Schizophrenia	(X)	(x)	—	Relapse rate: 1 (15%) < 2 (65%); Patient visits in psychiatric department: 1 (5%) < 2 (40%); Compliance with medication: 1 > 2 (30%) = 2 (40%)	12 months- follow-up:	+?
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Note. Age = average age or age range of index patients; BDI = Beck Depression Inventory; BPRS = Brief Psychiatric Rating Scale; CCMD-3 = Chinese Classification of Mental Disorders 3rd Version; CG = control group; CT = couple therapy, duration (weeks) = duration of the intervention in weeks; FT = family therapy; GT = group therapy; GQOLI = General Quality of Life; IT = individual therapy; MRT = medical routine treatment; number sessions = number of therapy sessions; PANSS = Positive And Negative Symptom Scale; PT = psychotherapy; sex = sex/gender of IP; Rate of female IP in %.

R: Random assignment: x: yes; m: matched samples.

N-IP: Sample size: Number of index patients (IP); -treat.: N that was treated; -pt: N of which posttest-data are presented.

Systemic interventions are printed in bold letters.

ITT-Analyse: Intent-to-treat analysis realized: x: yes; (x): not necessary because sample was fully retained (no drop-out); —: no/not mentioned.

manual: Manual mentioned? x: yes; (x): publication about intervention mentioned, not clear if it is a "real" manual; —: no/not mentioned.

PT-integrity: Was the manual fidelity/adherence to the planned intervention systematically evaluated? x: yes; systematic evaluation; (x): yes, "only" through supervision; —: no: no evaluation/not mentioned.

=.: No significant difference between the effects of two interventions.

Evaluation (of the trial and its results):

+ : trial with positive results for the efficacy of systemic therapy (ST) (ST more efficacious than alternative interventions or control groups without intervention or equally efficacious as other evidence based interventions);

+? : trial with predominantly positive results for the efficacy of ST;

+/- : trial with mixed (positive and negative) results for the efficacy of ST;

- : trial with negative results for the efficacy of ST (ST less efficacious than alternative interventions or control group).

TABLE 2
Summary

	Number RCT	Successful RCT
1. Mood disorders	7	5
2. Anxiety disorders	2	2
3. Somatoform disorders	1	1
4. Eating disorders	4+	4+
5. Psychosocial factors related to medical conditions and physical disorders	6	6
6. Substance use disorders	10	8
7. Schizophrenia and other psychotic disorders	8	8
Sum	38+	34+

Note.

Number RCT: Number of controlled, randomized (or matched) primary studies.

Successful RCT: Number of RCT, in which systemic therapy was equally as or more efficacious than other established interventions (e.g., psychodynamic IT, CBT IT, nondirective IT, family psychoeducation, group therapy, antidepressive medication) or significantly more efficacious than control groups without treatment, or more efficacious than medical routine treatment (including antipsychotic medication, methadone substitution). The successful studies are marked in Table 1 with “+” or “+?”.

Boldface type: disorders with good empiric evidence (3+ successful trials).

summary of the data on the efficacy of systemic therapy for the various diagnostic groups.

Meta-Analyses Across Diagnostic Groups

Shadish et al. (1993) meta-analyzed the global efficacy of couple (CT) and family therapy (FT) ($N = 163$ controlled trials; FT: $N = 101$, CT: $N = 62$). The combined effect size of CFT was $d = .51$ (FT: $d = .47$, CT: $d = .60$)—higher than that of many medical and pharmaceutical interventions. When the efficacy of different CFT-orientations was compared against untreated control groups, behavioral interventions ($n = 40$, $d = .56$) had better results than systemic interventions ($n = 14$, $d = .28$). But direct comparisons showed no significant differences between the efficacy of behavior therapy and systemic therapy. Accounting for all potential confounding variables in regression analyses, all school differences disappeared. The use of a standardized manual had a positive effect (Shadish et al., 1993, 1995; see also: Markus et al., 1990).

Mood Disorders

A *Cochrane review* on the efficacy of couple therapy (CT) for depression (Barbato & D’Avanzo, 2006) identified $N = 8$ studies (1 systemic). They found no significant differences in efficacy between couple and ITs or between CT and antidepressive medication. Couple therapy was more efficacious than no or minimal treatment. Marital quality improved more through CT than through IT. There was no significant difference in the drop-out rates of CT and IT, but the drop-out rate was significantly smaller for CT than for antidepressive medication. Another *Cochrane review* on family therapy for depression could not perform a statistical meta-analysis due to the heterogeneity of the studies (Henken et al., 2007).

We identified six RCTs on the efficacy of systemic therapy for *depression*: While the oldest trial shows onset of systemic couple therapy (CT) treatment effects to be slower than that of medication (Friedman, 1975), the *London Depression Intervention Trial* proves that systemic CT is more effective than antidepressive medication in reducing depressive symptoms in the posttest and in the 2-year follow-up. CT also improved family relations. Short-term therapy costs of CT were higher than those of antidepressive medication, but overall health costs for both groups did not differ significantly—neither during the treatment interval nor during the 2-year follow-up interval (Jones & Asen, 2000; Leff et al., 2000).

In the *Helsinki Psychotherapy Study*, 326 outpatients with depressive and/or other disorders were randomly assigned to three types of IT: long-term or short-term psychodynamic therapy or solution-focused therapy. Both short-term interventions were equally effective at 1-, 3, and 5-year follow-up with regard to depressive symptoms, remission, work ability, sick-leave days, and family relations. The lack of significant group differences could *not* be attributed to a lack of statistical power (Knekt & Lindfors, 2004; Knekt, Lindfors, Härkänen et al., 2008a; Knekt, Lindfors, Laaksanen et al., 2008b).

Patients with major depressive disorder (MDD) were randomly assigned to one of four treatment conditions after discharge from psychiatric hospitalization: pharmacotherapy only; pharmacotherapy and CBT; pharmacotherapy and Problem-centered Systems Family Therapy; pharmacotherapy, CBT, and family therapy. Outpatient treatment continued for 6 months. Symptoms were assessed monthly for 1 year. Rates of remission (16%) and improvement (29%) were generally low for all interventions. However, all treatments including a family therapy component of on average five sessions (vs. no family therapy) generally improved therapy results (depressive symptoms, suicidal ideation, cases improved and in remission, treatment failures), whereas 13 sessions of CBT (vs. no CBT) had no significant effect on the variables mentioned except for the percentage of treatment failures (Miller et al., 2005; Table 1).

An Italian RCT showed that family therapy combined with (maintenance) medication reduces relapse rates of recurrent MDD to a greater extent than a dose increase of antidepressants without psychosocial intervention (Fabbri, Fava, Rafanelli, & Tomba, 2007).

In Belgium, 83 MDD patients were randomly assigned to multifamily group therapy (MFGT) combined with inpatient treatment as usual (TAU), single systemic family therapy combined with TAU, or TAU alone. In the 3- and 15-months follow-up data, both family therapy conditions showed better results than TAU, but the differences reached significance only after 15 months when MFGT was significantly superior to the other two groups. Partners involved in family treatments were significantly more likely to notice improvements in the emotional health of the patient early on (Lemmens, Eisler, Buysse, Heene, & Demyttenaere, 2009).

For their *Cochrane review* of family therapy for *bipolar disorders*, Justo et al. (2007) identified seven (quasi-)randomized trials. Again, the heterogeneity of the studies did not permit a statistical analysis.

For the total sample of patients with *bipolar disorders*, the addition of a family intervention (individual FT or multifamily group therapy [MFGT]) to standard medication did not improve outcome (Miller, Solomon, Ryan, & Keitner, 2004). However, in the subsample of patients from families with high levels of impairment,

the addition of a family intervention resulted in a significantly improved course of illness (less depressive episodes, less time spent in a depressive episode; Miller et al., 2008). MFGT is significantly more efficacious in preventing a hospitalization if a relapse occurs (5% vs. 31% vs. 38%; Solomon, Keitner, Ryan, Kelley, & Miller, 2008).

Anxiety Disorders

In a German study, combined resource oriented IT was more efficacious than CBT IT for social phobia (Willutzki, Neumann, Haas, Koban, & Schulte, 2004). The Helsinki study demonstrated that solution-focused IT was equally efficacious as short-term psychodynamic IT with regard to anxiety disorders, too (Knekt & Lindfors, 2004; Knekt, Lindfors, Härkänen et al., 2008a; Knekt, Lindfors, Laaksonen et al., 2008b).

Somatoform Disorders

A Turkish RCT shows that conversion disorders are treated more efficaciously through paradoxical interventions than through medication (Diazepam) (Ataoglu, 2003).

Eating Disorders

Four RCT with (predominantly) adult patients are described here. Five additional trials described elsewhere (Sydow et al., 2006) show that systemic therapy is efficacious with adolescents and adult patients.

A British study showed that out-patient systemic therapy (individual and family) was equally efficacious as alternative interventions (in-patient therapy, out-patient GT) for anorexia nervosa in the 1-year follow-up. All three interventions were more efficacious than a control group without intervention. In the 2-year-follow-up, only the systemic intervention was more efficacious than the control group (Crisp et al., 1991; Gowers, Norton, Halek, & Crisp, 1994). A second British trial showed 14 sessions of Maudsley approach CFT being equally efficacious as 25 sessions of focal psychoanalytic IT; both interventions were superior to routine treatment (Dare, Eisler, Russell, Treasure, & Dodge, 2001).

In a Spanish study, systemic FT was equally efficacious as the combination of peer GT and parent support groups in the treatment of eating disorders; in the subgroup of bulimic patients systemic FT was more efficacious than the alternative treatment (Espina Eizaguirre, Ortego Saenz de Cabezon, & Ochoa de Alda Martinez-de-Appellaniz, 2000; Espina Eizaguirre, Ortego Saenz de Caltheon, & Ochoa de Alda Appellaniz, 2002). Structural family therapy combined with medication (20–60 mg/day, Citalopram) was more effective than medication alone in the treatment of Anorexia nervosa (weight gain, relapse risk) in China (Li, Wang, & Ma, 2006).

Psychosocial Factors Related to Medical Conditions and Physical Illness

One *meta-analysis* analyzed the effects of psychosocial interventions for chronic somatic disorders (Martire et al., 2004), demonstrating that inclusion of partners in treatment reduced depressive symptoms in patients. In patients with heart disease it even reduced mortality, possibly through improved diet, sport, and improved health

consciousness. Family members' burden, depression, and anxiety were reduced, too, especially if the intervention focused on the relationship between patient and partner.

Six RCT were identified (Table 1). In a German trial, systems oriented consultations (including patients, family members, and physicians) increased the survival rate in certain subgroups of patients with *lung cancer* (Wirsching, Drings, Georg, Riehl, & Schmidt, 1989). In a Chinese study, systemic family therapy combined with medical routine treatment (MRT: operation) helped to reduce postoperative anxiety and depression and to increase subjectively perceived (not objective) social support of *breast cancer* patients compared with MRT alone (Hu et al., 2007).

Solution-focused couple therapy plus MRT was more helpful than MRT alone after *myocardial infarction*. After 9 months, rehabilitation success and depression were improved, both from the patients, and from their partners' perspective (Priebe & Sinning, 2001).

Structural ecosystemic family therapy reduced psychological stress and family hassles among female, black HIV-patients to a greater extent than person-centered IT or a nonintervention control group. However, neither intervention could buffer the general longitudinal decline of family support (Mitrani, Prado, Feaster, Robinson-Batista, & Szapocznik, 2003; Prado et al., 2002; Szapocznik et al., 2004).

Five sessions of couple therapy compared with no psychosocial intervention had no effect on somatic measures for *orthopedic disorders* at 12-months follow-up and only improved marital communication. However, at 5-year follow-up, psychological distress was significantly decreased in the Finnish intervention group and increased in the control group (Saarijärvi, 1991; Saarijärvi, Alanen, Rytökoski, & Hyppä, 1992; Saarijärvi, Lahti, & Lahti, 1989; Saarijärvi, Rytökoski, & Alanen, 1991). In another trial, six sessions of systemic (solution-focused) IT, compared with a control group without psychosocial intervention, led to an improved adaptation to the orthopedic illnesses and—2 months later—to a significantly higher percentage of patients who had returned to work (Cockburn, Thomas, & Cockburn, 1997).

Substance Use Disorders

Two *meta-analyses* about substance use disorders are summarized. Stanton and Shadish (1997) analyzed trials on couple and family therapy (CFT) for *drug abuse* in adulthood and adolescence ($N = 15$ studies: 11 systemic, 4 other). CFT was found to be more efficacious than individual counseling/therapy, GT, and family psychoeducation ($d = .42$ for adult patients)—in posttests ($d = .39$) as well as at 4-year-follow-up ($d = .46$). Dropout rate was lower in CFT than in any other intervention.

O'Farrell and Fals-Stewart (2001) analyzed $N = 36$ RCT regarding interventions for *alcohol dependence*: CFT was more efficacious than IT or a waiting list control condition with regard to alcohol consumption/disorder, initiation of treatment, drop-out rate, therapy success, and adaptation of family members. CFT and IT both improve the couple relationship. The evidence base was best for the efficacy of behavioral CFT, and second best for systemic CFT.

We identified 10 RCTs on various substance use disorders: 4 on alcohol, 4 on heroin, and 2 on other illegal drugs (Table 1). Three forms of inpatient therapy for *alcohol disorders* were compared: The two groups with intensive couple therapy (CT) were superior to the group without CT at the end of treatment. At follow-ups, however, group differences were not significant with respect to abstinence (McCrary, Moreau,

Paolino, & Longabaugh, 1982; McCrady, Paolino, Longabaugh, & Rossi, 1979). In another trial, systemic family therapy was equally efficacious as problem-solving FT at the end of treatment and at 6-months follow-up (Bennun, 1988). Another RCT revealed no significant group difference between eight sessions of systems oriented CT and one session of couple counseling (Zweben, Pearlman, & Li, 1988). The fourth RCT on alcohol problems had mixed results, which unfortunately could not be interpreted, because the researchers did not perform an intent-to-treat analysis (Beutler et al., 1993; Harwood, Beutler, Castillo, & Karno, 2006; Karno, Beutler, & Harwood, 2002; Kuenzler & Beutler, 2003; Rohrbaugh, Shoham, Spungen, & Steinglass, 1995).

With regard to *illegal substance disorders*, an older study showed that structural FT was equally efficacious as GT for relatives of the index patient (Ziegler-Driscoll, 1977). In a new trial, solution-focused GT was as efficacious as traditional problem-focused GT with regard to substance abuse, but more efficacious for comorbid conditions like depression (Smock et al., 2008).

Three RCT from the United States (Stanton, Steier, & Todd, 1982; Stanton & Todd, 1982—Kraft, Rothbart, Hadley, McLellan, & Asch, 1997; McLellan, Arndt, Metzger, Woody, & O'Brian, 1993) and the United Kingdom (Yandoli, Eisler, Robbins, Mulleady, & Dare, 2002) demonstrated that systemic FT combined with methadone substitution is more efficacious for the treatment of *heroin addiction* than TAU (methadone substitution) with respect to abstinence of illegal drugs (follow-ups of up to 1.5 years). FT even reduced the mortality of patients on methadone (Stanton & Todd, 1982). A fourth Dutch trial also had positive results 18 months after the onset of therapy. However, due to the small sample size, the difference between FT group (64% abstinence) and control group (46%) did not reach significance (Romijn, Platt, & Schippers, 1990).

US-treatment guidelines require the inclusion of the family as a central element in assessment and therapy of substance use disorders in adults (McCrady & Ziedonis, 2001) as well as adolescents (see Sydow et al., 2006).

Schizophrenia and Other Psychotic Disorders

The latest Cochrane review shows that family intervention may decrease the frequency of relapse, of hospital admission, and may encourage compliance with medication. Yet, family intervention did not markedly affect the drop out rate or suicide risk. It may improve social impairment and the levels of expressed emotion within the family. Family interventions for schizophrenia are cost effective and help to reduce health costs. Effects of therapy schools or settings (family therapy, relatives groups without the index patient present) were not analyzed (Pharoah et al., 2006).

We identified three Italian (Bertrando et al., 2006; Bressi, Manenti, Frongia, Porcellana, & Invernizzi, 2008; Giacomo et al., 1997), one Spanish (Espina & Gonzalez, 2003), and four Chinese RCT published in Mandarin (Cao & Lu, 2007; Zhang, Liu, Pan et al., 2006; Zhang, Yuan, Yao et al., 2006; Zhou, 2003). All eight trials show that the combination of systemic family therapy and antipsychotic medication is more efficacious than medication alone to reduce treatment drop-out rates and the risk of relapse, decrease symptoms of schizophrenia, improve compliance with medication, quality of life, and health of patients as well as family and other social relations (Table 1).

DISCUSSION

How Efficacious is Systemic Therapy?

We identified and content analyzed methodology and results of 38 RCTs about the efficacy of systemic therapy for disorders of adulthood, published in English, Chinese (Mandarin), Spanish, and German. Because of the high methodological heterogeneity of the primary studies a quantitative meta-analysis could not be performed. Our results can be summarized as follows (see also Baucom et al., 1998; Pinosof & Wynne, 1995; Shadish & Baldwin, 2003; Tables 1–2):

1. In 34 of 38 RCT, systemic therapy is either significantly more efficacious than control groups without a psychosocial intervention or systemic therapy is equally or more efficacious than other evidence based interventions (e.g., CBT, family-psychoeducation, GT, or antidepressant/neuroleptic medication).
2. Systemic therapy is particularly efficacious (defined by more than three independent RCT with positive outcomes) with adult patients in the treatment of affective disorders, eating disorders, substance use disorders, psychosocial factors related to medical conditions, and schizophrenia.
3. Research on the efficacy of systemic therapy for adult disorders focuses on certain diagnostic groups, while other important disorders are neglected in research (e.g., personality or sexual disorders).
4. We found no indication for adverse effects of systemic therapy.
5. Systemic therapy alone is not always sufficient. In certain severe disorders, a combination with other psychotherapeutic and/or pharmacological interventions is most helpful (e.g., schizophrenia; heroin dependence; severe depression).
6. The drop-out rate of systemic therapy is lower than that of any other form of psychotherapy (Beutler et al., 1993; Giacomo et al., 1997; Leff et al., 2000; Prado et al., 2002; Stanton & Shadish, 1997; Willutzki et al., 2004).
7. Highly efficacious interventions that evolved in the context of systemic (and Ericksonian) therapy are resource/strengths orientation (Grawe & Grawe-Gerber, 1999) and positive reframing (Shoham-Salomon & Rosenthal, 1987).

Research Implications

Research on the efficacy of systemic therapy has made considerable progress in the last 10 years. But research focuses more on disorders in childhood and adolescence (Sydow et al., 2006, in preparation: 47 RCT published until 2004) than on disorders in adults ($N = 38$ RCT published until 2008).

Several methodological recommendations derived in earlier reviews (e.g., Diamond & Siqueland, 2001; Kazdin, 2000; Lebow & Gurman, 1995; Pinosof & Wynne, 1995) have been taken into account in the majority of the trials analyzed here. We only included RCTs with standardized definitions of the *disorder(s)* (ICD, DSM) researched. In most trials *multiple data sources* (self-report, physiological, health insurance data, external raters) and multiple *outcome measures* with standardized procedures were used. Some trials studied *follow-up-intervals* of up to 5 years (e.g., Knekt, Lindfors, Härkänen et al., 2008a; Wirsching et al., 1989). Often, systemic interventions are compared with validated alternative interventions (e.g., CBT-IT/-FT,

antidepressive medication). More and more patient groups are researched that resemble clinical “real world” populations.

However, some other methodological requirements have not yet been adequately integrated into research practice:

1. Clear definition of the interventions applied. Manual-like publications or *treatment manuals* (e.g., Jones & Asen, 2000/2002; Rohrbaugh et al., 1995—review: Carr, 2009) were applied in only 15 trials.
2. *Intent-to-treat analyses* were computed in only nine studies (in two further studies partially).
3. *Treatment adherence* was only assessed occasionally (empirical evaluation: four studies; by supervision: seven studies).
4. *Samples* with at least 50 patients in each treatment group (Chambless & Hollon, 1998) were realized in only five trials (Cao & Lu, 2007; Knekt & Lindfors, 2004; Szapocznik et al., 2004; Zhang, Yuan et al., 2006; Zweben et al., 1988).
5. The studies applied heterogeneous outcome measures. The *use of common measures* of individual and family functioning (e.g., CORE: Barkham et al., 1998; SCORE: Stratton, Bland, Janes, & Lask, 2010) is not yet common.
6. *Control of attention-placebo-effects*: While often alternative psychotherapies in a similar dose were applied, none of the studies used an attention control group.

A strength of our meta-content analysis is that we included non-English publications. Most trials in our sample were conducted in Europe (20 trials: United Kingdom: 5, Italy: 4, Germany: 3, Finland: 2, one of them counted twice, Spain: 2, Belgium: 1, the Netherlands: 1, Turkey: 1) and the United States (12 trials). Six come from China. We could not identify any trials from Africa, Australia, or Latin America or relevant publications in languages other than English, Mandarin, Spanish, or German. More research in a greater diversity of countries and cultures would be desirable. European and Chinese therapy research on the efficacy of systemic therapy published in languages other than English may often be overlooked by Anglo-Saxon authors up to now.

CONCLUSION

Results of this meta-content analysis show that systemic therapy in its different settings (family, couples, group, multifamily group, IT) is an efficacious approach for the treatment of disorders in adults, particularly for mood disorders, substance disorders, eating disorders, schizophrenia, and psychological factors in physical illness. This evidence also led to the recognition of systemic therapy as an evidence-based treatment by the German “Scientific Board for Psychotherapy” in 2008 (Wissenschaftlicher Beirat Psychotherapie, 2009).

REFERENCES

- *Primary study: described in Table 1 and “Results”;
 **Meta-analysis (including Cochrane-Review): described in “Results.”
 Alexander, J.F., Sexton, T.L., & Robbins, M.S. (2002). The developmental status of family therapy in family psychology intervention science. In H.S. Liddle, D. Santisteban, R. Levant,

- & J. Bray (Eds.), *Family psychology intervention science* (pp. 17–40). Washington, DC: American Psychological Association.
- Asen, E. (2002). Outcome research in family therapy. *Advances in Psychiatric Treatment*, 8, 230–238.
- Ataoglu, A. (2003). Paradoxical therapy in conversion reaction. *Journal of Korean Medical Science*, 18, 581–584.
- **Barbato, A., & D'Avanzo, B. (2006). Marital therapy for depression. *Cochrane Database Syst Rev*, April 19 (2): CD004188. Review.
- Barkham, M., Evans, C., Margison, M., McGrath, G., Mellor-Clarke, J., Milne, D., et al. (1998). The rationale for developing and implementing core outcome batteries for routine use in service settings and psychotherapy outcome research. *Journal of Mental Health*, 7(1): 35–47.
- Baucom, D.H., Shoham, V., Mueser, K.T., Daiuto, A.D., & Stickle, T.R. (1998). Empirically supported couple and family interventions for marital distress and adult mental health. *Journal of Consulting and Clinical Psychology*, 66, 53–88.
- Becvar, D.S., & Becvar, R.J. (2009). *Family therapy: A systemic integration* (7th ed.). Boston: Pearson.
- *Bennun, I. (1988). Treating the system or the symptom: Investigating family therapy for alcohol problems. *Behavioural Psychotherapy*, 16, 165–176.
- *Bertrando, P., Cecchin, G., Clerici, M., Beltz, J., Milesi, A., & Cazzullo, C.L. (2006). Expressed emotion and Milan systemic intervention: A pilot study on families of people with a diagnosis of schizophrenia. *Journal of Family Therapy*, 28, 81–102.
- *Beutler, L.E., Patterson, K., Jacob, T., Shoham, V., Yost, E., & Rohrbaugh, M. (1993). Matching treatment to alcoholism subtypes. *Psychotherapy*, 30, 463–472.
- *Bressi, C., Manenti, S., Frongia, P., Porcellana, M., & Invernizzi, G. (2008). Systemic family therapy in schizophrenia: A randomized clinical trial of effectiveness. *Psychotherapy and Psychosomatics*, 77(1): 43–49.
- *Cao, Y.K., & Lu, A.Y. (2007). The influence of systemic family therapy on the quality of life in schizophrenic patients. *Journal of Clinical Psychological Medicine*, 17(6): 403–404.
- Carr, A. (2009). The effectiveness of family therapy and systemic interventions for adult-focused problems. *Journal of Family Therapy*, 31, 46–74.
- Chambless, D.L., Baker, M.J., Baucom, D.H., Beutler, L.E., Calhoun, K.S., Chrits-Christoph, P., et al. (1998). Update on empirically validated therapies II. *Clinical Psychologist*, 51, 3–15.
- Chambless, D.L., & Hollon, S.D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7–18.
- *Cockburn, J.T., Thomas, F.N., & Cockburn, O.J. (1997). Solution-focused therapy and psychosocial adjustment to orthopedic rehabilitation in a work hardening program. *Journal of Occupational Rehabilitation*, 7, 97–106.
- Cottrell, D., & Boston, P. (2002). Practitioner review: The effectiveness of systemic family therapy for children and adolescents. *Journal of Child Psychology and Psychiatry*, 43, 573–586.
- *Crisp, A.H., Norton, K., Gowers, S., Halek, C., Bowyer, C., Yeldham, D., et al. (1991). A controlled study of the effect of therapies aimed at adolescent and family psychopathology in anorexia nervosa. *British Journal of Psychiatry*, 159, 325–333.
- *Dare, C., Eisler, I., Russell, G., Treasure, J., & Dodge, L. (2001). Psychological therapies for adults with anorexia nervosa: Randomised-controlled trial of out-patient treatments. *British Journal of Psychiatry*, 178, 216–221.
- Diamond, G., & Siqueland, L. (2001). Current status of family intervention science. *Child Adolescent Psychiatric Clinics North America*, 10, 641–661.
- **Dunn, R.L., & Schwebel, A.I. (1995). Meta-analytic review of marital therapy outcome research. *Journal of Family Psychology*, 9(1): 58–68.
- **Edwards, M.E., & Steinglass, P. Family therapy outcomes for alcoholism. *Journal of Marital and Family Therapy* 21(4), 475–509.

- *Espina, A., & Gonzalez, P. (2003). Intervenciones familiares en la esquizofrenia. Cambios en la sintomatología y el ajuste social (Family interventions in Schizophrenia. Changes in symptoms and social adjustment). *Salud Mental, 26*(1): 51–58.
- *Espina Eizaguirre, A., Ortego Saenz de Cabezón, M.A., & Ochoa de Alda Martínez-de-Appellaniz, I. (2000). Un ensayo controlado de intervenciones familiares en trastornos alimentarios (A controlled trial of family interventions in eating disorders). *Anales de Psicología, 16*(8): 322–336.
- *Espina Eizaguirre, A., Ortego Saenz de Caltheon, M.A., & Ochoa de Alda Appellaniz, I. (2002). Un ensayo controlado de intervenciones familiares en trastornos alimentarios. Cambios en psicopatología y ajuste social (A controlled trial of family interventions in eating disorders. Changes in psychopathology and social adjustment). *Apuntes de Psicología, 20*(1): 49–62.
- *Fabbri, S., Fava, G.A., Rafanelli, C., & Tomba, E. (2007). Family intervention approach to loss of clinical effect during long-term antidepressant treatment: A pilot study. *Journal of Clinical Psychiatry, 68*(9): 1348–1351.
- Fonagy, P., & Roth, A. (2004a). Ein Ausblick über die Ergebnisforschung anhand nosologischer Indikationen: Teil I (A review of outcome research: Part I). *Psychotherapeutenjournal, 3*, 204–218.
- Fonagy, P., & Roth, A. (2004b). Ein Ausblick über die Ergebnisforschung anhand nosologischer Indikationen: Teil II (A review of outcome research: Part II). *Psychotherapeutenjournal, 3*, 300–314.
- *Friedman, A.S. (1975). Interaction of drug therapy with marital therapy in depressive patients. *Archives of General Psychiatry, 32*, 619–637.
- *Giacomo, P., de Pierri, G., Santoni Rugiu, A., Buonsante, M., Vadrucchio, F., & Zavoianni, L. (1997). Schizophrenia: A study comparing a family therapy group following a paradoxical model plus psychodrugs and a group treated by the conventional clinical approach. *Acta Psychiatrica Scandinavica, 95*(3): 183–188.
- Gollan, J.K., & Jacobson, N.S. (2002). Developments in couple therapy research. In H.S. Liddle, D. Santisteban, R. Levant, & J. Bray (Eds.), *Family psychology intervention science* (pp. 105–122). Washington, DC: American Psychological Association.
- Gottman, J.M., Ryan, K.D., Carrere, S., & Erley, A.M. (2002). Towards a scientifically based marital therapy. In H.S. Liddle, D. Santisteban, R. Levant, & J. Bray (Eds.), *Family psychology intervention science* (pp. 147–174). Washington, DC: American Psychological Association.
- *Gowers, S., Norton, K., Halek, C., & Crisp, A.H. (1994). Outcome of outpatient psychotherapy in a random allocation treatment study of anorexia nervosa. *International Journal of Eating Disorders, 15*, 165–177.
- **Grawe, K., Donati, R., & Bernauer, F. (1994). *Psychotherapie im Wandel: Von der Konfession zur Profession*. Göttingen: Hogrefe.
- Grawe, K., & Grawe-Gerber, M. (1999). Ressourcenaktivierung (Strength activation). *Psychotherapeut, 44*, 63–73.
- Gurman, A.S., & Liddle, H.A. (2002). Family psychology: Science based interventions. *Psychotherapy Research, 12*(3): 389–391.
- *Harwood, T.M., Beutler, L.E., Castillo, S., & Karno, M. (2006). Common and specific effects of couples treatment for alcoholism: A test of the generic model of psychotherapy. *Psychology and Psychotherapy, 79*(Pt. 3): 365–384.
- **Henken, H.T., Huibers, M.J., Churchill, R., Restifo, K., & Roelofs, J. (2007). Family therapy for depression. *Cochrane Database Syst Review, July 18* (3): CD006728.
- *Hu, D., Wu, H., Dong, Y., Chen, D., Li, Y., & Hu, L. (2007). Study on the effect of family therapy on social support and mental status in peri-operative patients with breast cancer. *Journal of Nursing Administration, 7*(9): 9–11.
- *Jones, E., & Asen, E. (2000). *Systemic couple therapy and depression*. London: Karnac.

- **Justo, L.P., Soares, B.G.O., & Calil, H.M. (2007). Family interventions for bipolar disorder. *Cochrane Database of Systematic Reviews*, 4. No.: CD005167, doi: 10.1002/14651858.CD005167.pub2.
- *Karno, M.P., Beutler, L.E., & Harwood, T.M. (2002). Interactions between psychotherapy procedures and patient attributes that predict alcohol treatment effectiveness: A preliminary report. *Addictive Behaviors*, 27, 779–797.
- Kazdin, A.E. (2000). Developing a research agenda for child and adolescent psychotherapy. *Archives of General Psychiatry*, 58, 729–740.
- Kazdin, A.E., & Weisz, J.R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66, 19–36.
- *Knekt, P., & Lindfors, O. (Eds.). (2004). *A randomized trial of the effect of four forms of psychotherapy on depressive and anxiety disorders: Design, methods, and results on the effectiveness of short-term psychodynamic psychotherapy and solution-focused therapy during a one-year follow-up. Kela, Helsinki (studies in social security and health 77)*. Finland: The Social Insurance Institution.
- *Knekt, P., Lindfors, O., Härkänen, T., Välikoski, M., Virtala, E., & the Helsinki Psychotherapy Study Group, et al. (2008a). Randomized trial on the effectiveness of long- and short-term psychodynamic psychotherapy and solution-focused therapy on psychiatric symptoms during a 3-year follow-up. *Psychological Medicine*, 38, 689–703.
- *Knekt, P., Lindfors, O., Laaksonen, M.A., Raitasalo, R., Haaramo, P., & the Helsinki Psychotherapy Study Group, et al. (2008b). Effectiveness of short-term and long-term psychotherapy on work-ability and functional capacity—A randomized clinical trial on depressive and anxiety disorders. *Journal of Affective Disorders*, 107, 95–106.
- *Kraft, M.K., Rothbart, A.B., Hadley, T.R., McLellan, A.T., & Asch, D.A. (1997). Are supplementary services provided during methadone maintenance really cost-effective. *American Journal of Psychiatry*, 154, 1214–1219.
- *Kuenzler, A., & Beutler, L.E. (2003). Couple alcohol treatment benefits patients' partners. *Journal of Clinical Psychology*, 59, 791–806.
- Lebow, J.L., & Gurman, A.S. (1995). Research assessing couple and family therapy. *Annual Review of Psychology*, 46, 27–57.
- *Leff, J., Vearnals, S., Brewin, C.R., Wolff, G., Alexanthe, B., Asen, E., et al. (2000). The London depression intervention trial. Randomised controlled trial of antidepressants vs. couple therapy in the treatment and maintenance of people with depression living with a partner: Clinical outcome and costs. *British Journal of Psychiatry*, 177, 95–100 and Corrigendum BJP, 177, 284.
- Leichsenring, F., & Rabung, S. (2008). Effectiveness of long-term psychodynamic psychotherapy: A meta-analysis. *Journal of the American Medical Association*, 300, 1551–1565.
- *Lemmens, G.M.D., Eisler, I., Buysse, A., Heene, E., & Demyttenaere, K. (2009). The effects on mood of adjunctive single-family and multi-family group therapy in the treatment of hospitalized patients with major depression. *Psychotherapy and Psychosomatic*, 78, 98–105.
- *Li, Y., Wang, J., & Ma, J. (2006). A controlled clinical trial of Citalopram and Citalopram combined with family therapy in the treatment of Anorexia nervosa. *Shanghai Archives of Psychiatry*, 18, 158–160.
- Liddle, H.A., & Rowe, C.L. (2004). Advances in family therapy research. In M.P. Nichols & R.C. Schwartz (Eds.), *Family therapy: Concepts and methods* (6th ed., pp. 395–435). Boston: Allyn & Bacon.
- Liddle, H.A., Santisteban, D.A., Levant, R.F., & Bray, J.H. (2002). *Family psychology: Science-based interventions*. Washington, DC: American Psychological Association.
- Lutz, W. (Ed.). (2006). *Lehrbuch der Paartherapie (Textbook of couple therapy)*. München : Ernst Reinhardt.
- **Markus, E., Lange, A., & Pettigrew, T.F. (1990). Effectiveness of family therapy: A meta-analysis. *Journal of Family Therapy*, 12, 205–221.

- **Martire, L.M., Lustig, A.P., Schulz, R., Miller, G.E., & Helgeson, V.S. (2004). Is it beneficial to involve a family member? A meta-analysis of psychosocial interventions für chronic illness. *Health Psychology, 23*, 599–611.
- *McCrary, B.S., Moreau, J., Paolino, T.J., & Longabaugh, R. (1982). Joint hospitalization and couples therapy for alcoholism: A four-year follow-up. *Journal of Studies on Alcohol, 43*, 1244–1250.
- *McCrary, B.S., Paolino, T.F., Longabaugh, R., & Rossi, J. (1979). Effects of joint hospital admission and couples treatment for hospitalized alcoholics: A pilot study. *Addictive Behaviors, 4*, 155–165.
- McCrary, B.S., & Ziedonis, D. (2001). American Psychiatric Association practice guidelines for substance use disorders. *Behavior Therapy, 32*, 309–336.
- *McLellan, A., Arndt, I., Metzger, D., Woody, G., & O'Brian, C. (1993). The effects of psychosocial services in substance abuse treatment. *Journal of the American Medical Association, 269*, 1953–1959.
- *Miller, I.W., Keitner, G.I., Ryan, C.E., Solomon, D.A., Cardemil, E.V., & Beevers, C.G. (2005). Treatment matching in the posthospital care of depressed patients. *American Journal of Psychiatry, 162*, 2131–2138.
- *Miller, I.W., Keitner, G.I., Ryan, C.E., Uebelacker, L.A., Johnson, D.A., & Solomon, D.A. (2008). Family treatment for bipolar disorder: Family impairment by treatment interactions. *Journal of Clinical Psychiatry, 69*, 732–740.
- *Miller, I.W., Solomon, D.A., Ryan, C.E., & Keitner, G.I. (2004). Does adjunctive family therapy enhance recovery from bipolar I mood episodes? *Journal of Affective Disorders, 82*, 431–436.
- *Mitrani, V.B., Prado, G., Feaster, D.J., Robinson-Batista, C., & Szapocznik, J. (2003). Relational factors and family treatment engagement among low-income, HIV-positive African American mothers. *Family Process, 42*, 31–46.
- **O'Farrell, T.J., & Fals-Stewart, W. (2001). Family-involved alcoholism treatment. An update. *Recent Dev Alcohol, 15*, 329–356.
- Orlinsky, D.E., & Ronnestad, H. (2005). *How psychotherapists develop: A study of therapeutic work and professional growth*. Washington, DC: American Psychological Association.
- **Pharoah, F., Mari, J., Rathbone, J., & Wong, W. (2006). Family intervention for schizophrenia. *Cochrane Database Syst Review*, Oct 18 (4):CD000088. (Update of: Cochrane Database Syst Rev. 2003;(4):CD000088.)
- Pinsof, W.M., & Wynne, L.C. (1995). The effectiveness and efficacy of marital and family therapy: An empirical overview, conclusions, and recommendations. *Journal of Marital Family Therapy, 21*, 585–613.
- *Prado, G., Szapocznik, J., Mitrani, V.B., Mauer, M., Smith, L., & Feaster, D.J. (2002). Factors influencing engagement into interventions for adaptation to HIV in African American women. *AIDS Behavior, 6*, 141–151.
- *Priebe, & S.Sinning, U. (2001). Effekte einer kurzen paartherapeutischen intervention in der Koronarrehabilitation (Effects of a short couple intervention in cardiovascular rehabilitation). *Psychotherapie, Psychosomatische Medizin & Medizinische Psychologie, 51*, 276–280.
- Retzlaff, R. (2008). *Spiel-Räume. Lehrbuch der systemischen Therapie mit Kindern und Jugendlichen (Textbook of systemic therapy with children and adolescents)*. Stuttgart: Klett-Cotta.
- *Rohrbaugh, M., Shoham, V., Spungen, C., & Steinglass, P. (1995). Family systems therapy in practice: A systemic couples therapy for problem drinking. In B. Bongar & L. Beutler (Eds.), *Foundations of psychotherapy: Theory, research, and practice* (pp. 229–253). New York: Oxford University Press.
- *Romijn, C.M., Platt, J.J., & Schippers, G.M. (1990). Family therapy for Dutch drug abusers: Replication of an American study. *International Journal of Addictions, 25*, 1127–1149.

- *Saarijärvi, S. (1991). A controlled study of couple therapy in chronic back pain patients. Effects on marital satisfaction, psychological distress and health attitudes. *Journal of Psychosomatic Research, 35*, 265–272.
- *Saarijärvi, S., Alanen, E., Rytökoski, U., & Hyppä, T. (1992). Couple therapy improves mental well-being in chronic back pain patients. A controlled, five year follow-up study. *Journal of Psychosomatic Research, 7*, 651–656.
- *Saarijärvi, S., Lahti, T., & Lahti, I. (1989). Time-limited structural couple therapy with chronic low back pain patients. *Family Systems Medicine, 7*, 328–338.
- *Saarijärvi, S., Rytökoski, U., & Alanen, E. (1991). A controlled study of couple therapy in chronic back pain patients. No improvement of disability. *Journal of Psychosomatic Research, 35*, 671–677.
- Scheib, P., & Wirsching, M. (2004). *Paar-und Familientherapie: Leitlinie und Quellentext (Couple and family therapy)*. Stuttgart: Schattauer.
- Schweitzer, J., & von Schlippe, A. (2006). *Lehrbuch der systemischen Therapie und Beratung II: Das störungsspezifische Wissen (Textbook of systemic therapy and counseling II: Disorder specific knowledge)*. Göttingen: Vandenhoeck & Ruprecht.
- Sexton, T.L., Robbins, M.S., Hollimon, A.S., Mease, A.L., & Mayorga, C.C. (2003). Efficacy, effectiveness, and change mechanisms in couple and family therapy. In T.L. Sexton, G.R. Weeks, & M.S. Robbins (Eds.), *Handbook of family therapy* (pp. 229–262). New York: Brunner-Routledge.
- Shadish, W.R., & Baldwin, S.A. (2003). Meta-analysis of MFT interventions. *Journal of Marital and Family Therapy, 29*, 547–570.
- Shadish, W.R., & Baldwin, S.A. (2005). The effects of behavioral marital therapy: A meta-analysis of randomized controlled trials. *Journal of Consulting and Clinical Psychology, 73*, 6–14.
- **Shadish, W.R., Montgomery, L., Wilson, P., Wilson, M., Bright, I., & Okwumabua, T. (1993). The effects of family and marital psychotherapies: A meta-analysis. *Journal of Consulting and Clinical Psychology, 61*, 992–1002.
- **Shadish, W.R., Ragsdale, K., Glaser, R.R., & Montgomery, L.M. (1995). The efficacy and effectiveness of marital and family therapy: A perspective from meta-analysis. *Journal of Marital & Family Therapy, 21*, 345–360.
- **Shoham-Salomon, V., & Rosenthal, R. (1987). Paradoxical interventions: A meta-analysis. *Journal of Consulting and Clinical Psychology, 55*, 22–28.
- *Smock, S.A., Trepper, T.S., Wetchler, J.L., McCollum, E.E., Ray, R., & Pierce, K. (2008). Solution-focused group therapy for level 1 substance abusers. *Journal of Marital and Family Therapy, 34*, 107–120.
- Snyder, D.K., Castellani, A.M., & Whisman, M.A. (2006). Current status and future directions in couple therapy. *Annual Review of Psychology, 57*, 317–344.
- *Solomon, D.A., Keitner, G.I., Ryan, C.E., Kelley, J., & Miller, I.W. (2008). Preventing recurrence of bipolar I mood episodes and hospitalizations: Family psychotherapy plus pharmacotherapy versus pharmacotherapy alone. *Bipolar Disorders, 10*, 798–805.
- Sprenkle, D. (Ed.). (2002). *Effectiveness research in marriage and family therapy*. Alexandria: American Association of Marital & Family Therapists.
- Sprenkle, D.H. (2005). Systemic assessment. In M. Cierpka, V. Thomas, & D.H. Sprenkle (Eds.), *Family assessment: Integrating multiple clinical perspectives* (pp. 211–230). Göttingen: Hogrefe Press.
- **Stanton, M., & Shadish, W.R. (1997). Outcome, attrition and family-couples treatment for drug abuse: A meta-analysis and review of controlled comparative studies. *Psychological Bulletin, 122*, 170–191.
- *Stanton, M.D., Steier, F., & Todd, T.C. (1982). Paying families for attending sessions: Counteracting the dropout problem. *Journal of Marital Family Therapy, 8*, 371–373.

- *Stanton, M.D., & Todd, T.C. (1982). *Family therapy for drug abuse and addiction*. New York: Guilford.
- Stratton, P. (2005). *Report on the evidence base of systemic family therapy*. Association of Family Therapy, retrieved from www.aft.org.uk/docs/evidencedocsept05creditedSS.doc.
- Stratton, P., Bland, J., Janes, E., & Lask, J. (2010). Developing a practicable outcome measure for systemic family therapy: The SCORE. *Journal of Family Therapy*, 32, 232–258.
- Sydow, K.V. (1999). Sexuality during pregnancy and after childbirth: A meta-content analysis of 59 studies. *Journal of Psychosomatic Research*, 47, 27–49.
- Sydow, K.V. (2007). Systemische Psychotherapie mit Familien, Paaren und Einzelnen (Systemic psychotherapy with families, couples, and individuals). In C. Reimer, J. Eckert, M. Hautzinger, & E. Wilke (Eds.), *Psychotherapie: Ein Lehrbuch für Ärzte & Psychologen* (pp. 294–332). Heidelberg: Springer.
- Sydow, K.V., Beher, S., Retzlaff, R., & Schweitzer-Rothers, J. (2007a). *Die Wirksamkeit Systemischer Therapie/Familientherapie (The efficacy of systemic therapy/family therapy)*. Göttingen: Hogrefe.
- Sydow, K.V., Beher, S., Retzlaff, R., & Schweitzer-Rothers, J. (2007b). Systemische Therapie bei Störungen des Erwachsenenalters: Eine Meta-Inhaltsanalyse von 28 randomisierten Primärstudien (Systemic therapy for disorders of adulthood: A meta-content analysis of 28 randomized primary studies). *Psychotherapeut*, 52, 187–211.
- Sydow, K.V., Beher, S., Schweitzer-Rothers, J., & Retzlaff, R. (2006). Systemische Familientherapie bei Störungen des Kindes- und Jugendalters: Eine Meta-Inhaltsanalyse von 47 randomisierten Primärstudien (Systemic therapy for disorders of childhood and adolescence: A meta-content analysis of 47 randomized primary studies). *Psychotherapeut*, 51, 107–143.
- *Szapocznik, J., Feaster, D.J., Mitrani, V., Prado, G., Smith, L., Robinson-Batista, C., et al. (2004). Structural ecosystems therapy for HIV-seropositive African American women: Effects on psychological distress, family hassles, and family support. *Journal of Consulting and Clinical Psychology*, 72, 288–303.
- von Schlippe, A., & Schweitzer, J. (1996). *Lehrbuch der systemischen Therapie und Beratung (Textbook of systemic therapy and counseling)*. Göttingen: Vandenhoeck & Ruprecht.
- *Willutzki, U., Neumann, B., Haas, H., Koban, C., & Schulte, D. (2004). Zur Psychotherapie sozialer Ängste: Kognitive Verhaltenstherapie im Vergleich zu einem kombiniert ressourcenorientierten Vorgehen: Eine randomisierte kontrollierte interventionsstudie (Psychotherapy of social anxiety: Cognitive behavioral therapy compared to a combined strength oriented approach: A randomized controlled intervention study). *Zeitschrift für Klinische Psychologie & Psychotherapie*, 33, 42–50.
- *Wirsching, M., Drings, P., Georg, W., Riehl, J., & Schmidt, P. (1989). Familien-System-Konsultation bei Bronchialkrebs (Family system consultation for bronchial carcinoma). *System Familie*, 2, 65–81.
- Wissenschaftlicher Beirat Psychotherapie. (2009). Gutachten zur wissenschaftlichen Anerkennung der Systemischen Therapie (Review about the scientific acknowledgement of systemic therapy). *Deutsches Ärzteblatt*, 106, A208–A211, <http://www.aerzteblatt.de/v4/archiv/artikel.asp?src=suche&id=63355>.
- *Yandoli, D., Eisler, I., Robbins, C., Mulleady, G., & Dare, C. (2002). A comparative study of family therapy in the treatment of opiate users in a London drug clinic. *Journal of Family Therapy*, 24, 402–422.
- *Zhang, M.L., Yuan, G., Yao, J., Ni, S.Q., Zhang, X., An, B.F., et al. (2006). A controlled treatment trial of systemic family therapy for schizophrenic patients. *Chinese Journal of Behavioral Medical Science*, 15(8): 711–712.
- *Zhang, S., Liu, L., Pan, S., Feng, Y., Zhang, Y., & Zhou, Q. (2006). A controlled study of the effect of systemic family therapy on the relapse of schizophrenia. *Shandong Archives of Psychiatry*, 19(2): 138–139.

- *Zhou, X. (2003). The application of systemic family therapy in patients with schizophrenia. *Medical Journal of Chinese People Health, 15*(6): 361–362.
- *Ziegler-Driscoll, G. (1977). Family research study at Eagleville Hospital and Rehabilitation Center. *Family Process, 16*, 175–190.
- *Zweben, A., Pearlman, S., & Li, S. (1988). A comparison of brief advice and conjoint therapy in the treatment of alcohol abuse: The results of the marital systems study. *British Journal of Addiction, 83*, 899–916.