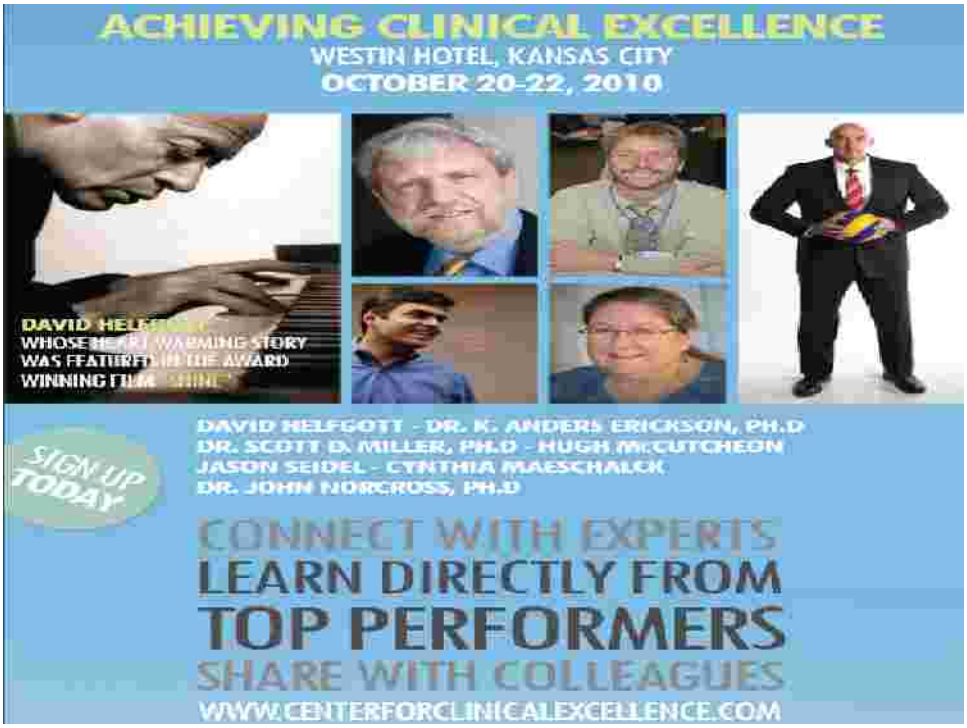
The Heart and Soul of Change:

What Works in Therapy

Scott D. Miller, Ph.D.

http://twitter.com/scott_dm http://www.linkedin.com/in/scottdmphd

www.centerforclinicalexcellence.com



What Works in Therapy

- "Accountability," "Stewardship," & "Return on Investment" the buzzwords of the day.
- Part of a world wide trend not specific to mental health and independent of any particular type of reimbursement system.

Lambert, M.J., Whipple, J.L., Hawkins, E.J., Vermeersch, D.A., Nielsen, S.L., Smart, D.A. (2004). Is it time for clinicians routinely to track patient outcome: A meta-analysis. Clinical Psychology, *10*, 288-301.

What Works in Therapy:
Pop Quiz

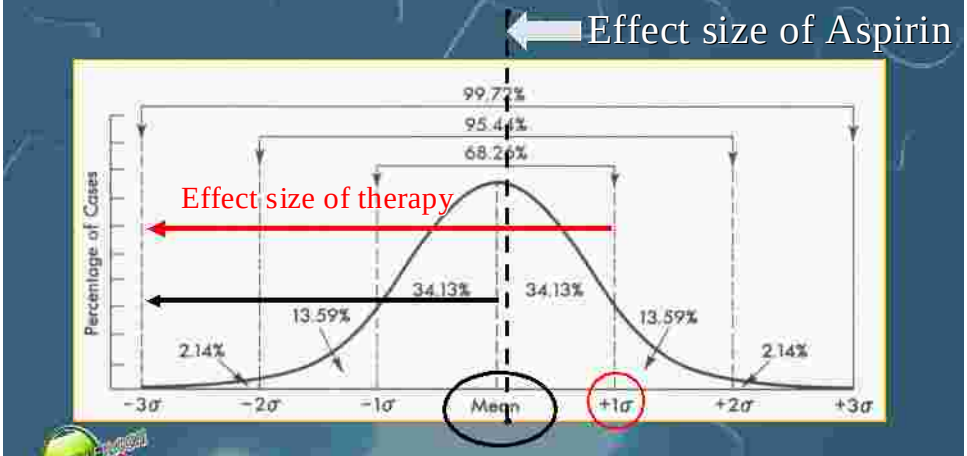
Question #1:

Research consistently shows that treatment works

True

Study after study, and studies of studies show the average treated client is better off than 80% of the untreated sample.

Tutorial on "Effect Size"



Rosenthal, R. (June 1990). How are we doing in soft psychology? *American Psychologist, 45*(6), 775-777.

Duncan, B., Miller, S., & Sparks, J. (2004). *The Heroic Client* (2nd ed.). Jossey-Bass: San Francisco, CA.

What Works in Therapy:
The Data

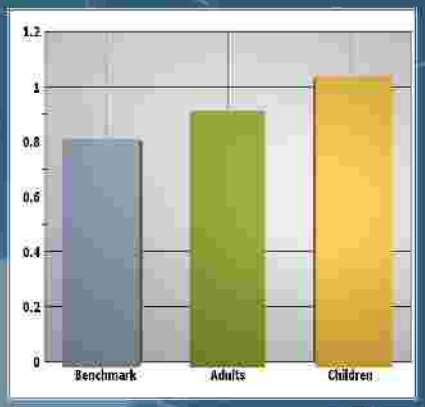
Treatment	Effect Size
Psychotherapy	.8 - 1.2 ?
Marital therapy	.8
Bypass surgery	.8 ?
ECT for depression	.8 ?
Pharmacotherapy for arthritis	.61 ?
Family therapy	.58 ?
AZT for AIDS mortality	.47 ?

Lipsey, M.W., & Wilson, D.B. (1993). The efficacy of psychological, behavioral, and educational treatment. *American Psychologist, 48*, 1181-1209.

Shadish, W.R., & Baldwin, S.A. (2002). Meta-analysis of MFT interventions. In D.H. Sprenkle (Ed.). Effectiveness research in marriage and family therapy (pp.339-370). Alexandria, VA: AAMFT.

What Works in Therapy:
An Example

- More good news:
  - Research shows that only 1 out of 10 clients on the average clinician's caseload is not making any progress.
- Recent study:
  - 6,000+ treatment providers
  - 48,000 plus real clients
  - Outcomes clinically equivalent to randomized, controlled, clinical trials.



Kendall, P.C., Kipnis, D, & Otto-Salaj, L. (1992). When clients don't progress. *Cognitive Therapy and Research, 16*, 269-281.
Minami, T., Wampold, B., Serlin, R. Hamilton, E., Brown, J., Kircher, J. (2008). Benchmarking the effectiveness of treatment for adult depression in a managed care environment: A preliminary study. *Journal of Consulting and Clinical Psychology*, 76*(1)*, 116-124.

What Works in Therapy:
The "Good News"

The bottom line?

- The majority of helpers are effective and efficient *most* of the time.
- Average treated client accounts for only 7% of expenditures.

So, what's the problem…

What Works in Therapy: The "Bad News"

- Drop out rates average 47%;
- Therapists frequently fail to identify failing cases;
- 1 out of 10 clients accounts for 60-70% of expenditures.

Lambert, M.J., Whipple, J., Hawkins, E., Vermeersch, D., Nielsen, S., & Smart, D. (2004). Is it time for clinicians routinely to track client outcome? A meta-analysis. *Clinical Psychology, 10*, 288-301.
Chasson, G. (2005). Attrition in child treatment. *Psychotherapy Bulletin, 40*(1), 4-7.

What Works in Therapy: Pop Quiz

Question #2:

Stigma, ignorance, denial, and lack of motivation are the most common reasons potential consumers do not seek the help they need.

False

Second to cost (81%), *lack of confidence* in the outcome of the service is the primary reason (78%). Fewer than 1 in 5 cite stigma as a concern.

http://www.apa.org/releases/practicepoll_04.html

What Works in Therapy:
Pop Quiz

Question #3:

Of all the factors affecting treatment outcome, treatment model (technique or programming) is the *most potent.*

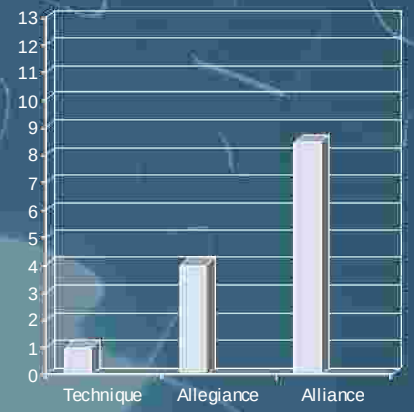
FALSE

Technique makes the smallest percentage-wise contribution to outcome of any known ingredient.

What Works in Therapy:
Factors accounting for Success

Outcome of Treatment:

- 60% due to "Alliance" ([aka "common factors"] 8%/13%)
- 30% due to "Allegiance" Factors (4%/13%)
- 8% due to model and technique (1/13)



Wampold, B. (2001). *The Great Psychotherapy Debate*. New York: Lawrence Erlbaum.

What Works in Therapy:
Current State of Clinical Practice

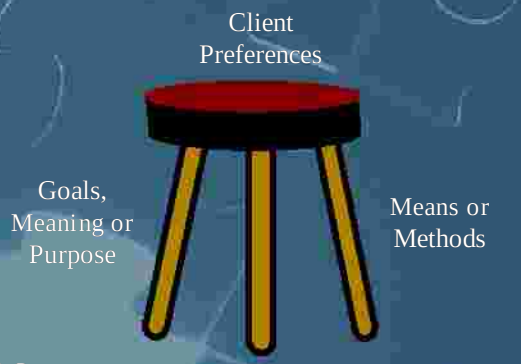
Nonetheless, in spite of the data:

- Therapists firmly believe that the expertness of their techniques leads to successful outcomes;
- The field as a whole is continuing to embrace the medical model.
  - Emphasis on so-called, "empirically supported treatments" or "evidence based practice."
  - Embracing the notion of diagnostic groups.

Eugster, S.L. & Wampold, B. (1996). Systematic effects of participants role on the evaluation of the psychotherapy session. *Journal of Consulting and Clinical Psychology, 64*, 1020-1028.

What Works in Therapy:
Research on the Alliance

- Research on the alliance reflected in over 1100 research findings.



Norcross, J. (2009). The Therapeutic Relationship. In B. Duncan, S. Miller, B. Wampold, & M. Hubble (eds.). *The Heart and Soul of Change*. Washington, D.C.: APA Press.

What Works in Therapy:
An Example

Dennis, M. Godley, S., Diamond, G., Tims, F. Babor, T. Donaldson, J., Liddle, H. Titus, J., Kaminer, Y., Webb, C., Hamilton, N., Funk, R. (2004). The cannibas youth treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment, 27*, 97– 213.

What Works in Therapy:
An Example

- 600 Adolescents marijuana users:
  - *Between the ages of 12-15;*
  - *Rated as or more severe than adolescents seen in routine clinical practice settings;*
  - *Significant co-morbidity (3 to 12 problems [83%], alcohol [37%]; internalizing [25%], externalizing [61%]).*
- Participants randomized into one of two arms (dose, type) and one of three types of treatment in each arm:
  - *Dose arm: MET+CBT (5 wks), MET+CBT (12 wks), Family Support Network (12 wks)+MET+CBT;*
  - *Type arm: MET/CBT (5 wks), ACRT (12 weeks), MDFT (12 wks).*

What Works in Therapy:
An Example

Cannabis Youth Treatment Project

•Treatment approach accounted for little more than 0% of the variance in outcome.

•By contrast, ratings of the alliance predicted:
- •Premature drop-out;
- •Substance abuse and dependency symptoms post-treatment, and cannabis use at 3 and 6 month follow-up.

Tetzlaff, B., Hahn, J., Godley, S., Godley, M., Diamond, G., & Funk, R. (2005). Working alliance, treatment satisfaction, and post-treatment patterns of use among adolescent substance users. *Psychology of Addictive Behaviors*, 19(2), 199-207.

Shelef, K., Diamond, G., Diamond, G., Liddle. H. (2005). Adolescent and parent alliance and treatment outcome in MDFT. *Journal of Consulting and Clinical Psychology*, 73(4), 689-698.

What Works in Therapy:
Pop Quiz

Question #4:

Research shows that some treatment approaches are *more effective* than others

FALSE

All approaches work equally well with some of the people some of the time.

What Works in Therapy:
An Example

- No difference in outcome between different types of treatment or different amounts of competing therapeutic approaches.

Godley, S.H., Jones, N., Funk, R., Ives, M Passetti, L. (2004). Comparing Outcomes of Best-Practice and Research-Based Outpatient Treatment Protocols for Adolescents. *Journal of Psychoactive Drugs. 36*(1), 35-48.

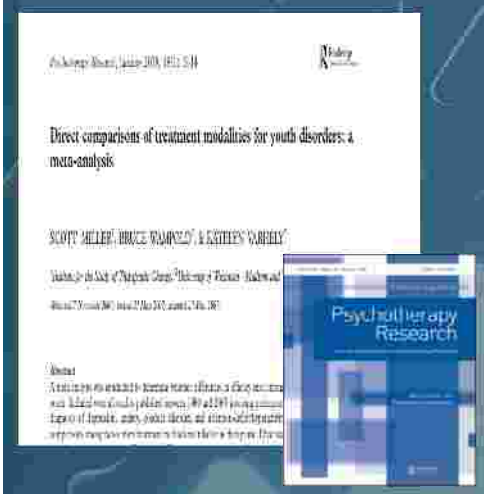
What Works in Therapy:
Do Treatments vary in Efficacy?

- The research says, *"NO!"*
- The lack of difference cannot be attributed to:
  - Research design;
  - Time of measurement;
  - Year of publication;
- The differences which have been found:
  - Do not exceed what would be expected by chance;
  - At most account for 1% of the variance.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods in psychotherapy. *Journal of Orthopsychiatry, 6*, 412-15.

Wampold, B.E. et al. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "All must have prizes." *Psychological Bulletin, 122*(3), 203-215.

What Works in Therapy:
Do Treatments vary in Efficacy?



- Meta-analysis of all studies published between 1980-2006 comparing bona fide treatments for children with ADHD, conduct disorder, anxiety, or depression:
  - *No difference in outcome between approaches intended to be therapeutic;*
  - *Researcher allegiance accounted for 100% of variance in effects.*

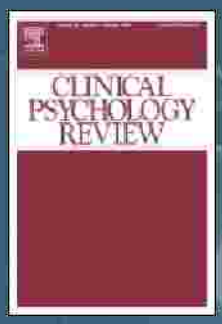
Miller, S.D., Wampold, B.E., & Varhely, K. (2008). Direct comparisons of treatment modalities for youth disorders: A meta-analysis. *Psychotherapy Research, 18*(1), 5-14

What Works in Therapy:
Do Treatments vary in Efficacy?

- Meta-analysis of all studies published between 1960-2007 comparing bona fide treatments for alcohol abuse and dependence:
  - *No difference in outcome between approaches intended to be therapeutic;*
  - *Approaches varied from CBT, 12 steps, Relapse prevention, & PDT.*
  - *Researcher allegiance accounted for 100% of variance in effects.*

Imel, Z., Wampold, B.E., Miller, S.& Fleming, R.. (2008). Distinctions without a difference. *Psychology of Addictive Behaviors, 22*(4), 533-543.

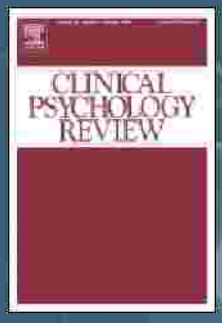
What Works in Therapy:
Do Treatments vary in Efficacy?



- Meta-analysis of all studies published between 1989-Present comparing bona fide treatments for PTSD:
  - *Approaches included desensitization, hypnotherapy, PD, TTP, EMDR, Stress Inoculation, Exposure, Cognitive, CBT, Present Centered, Prolonged exposure, TFT, Imaginal exposure.*
  - *Unlike earlier studies, controlled for inflated Type 1 error by not categorizing treatments thus eliminating numerous pairwise comparisons;*

Bemish, S., Imel, Z., & Wampold, B. (2008). The relative efficacy of bona fide psychotherapies for treating psttraumatic stress disorder: A meta-analysis of direct comparisons. *Clinical Psychology Review, 28,* 746-758.

What Works in Therapy:
Do Treatments vary in Efficacy?



- The results:
  - *No difference in outcome between approaches intended to be therapeutic on both direct and indirect measures;*
  - *D = .00 (Upper bound E.S = .13)*
  - *NNT = 14;*

  (14 people would need to be treated with the superior Tx in order to have 1 more success as compared to the "less" effective Tx).

Bemish, S., Imel, Z., & Wampold, B. (2008). The relative efficacy of bona fide psychotherapies for treating psttraumatic stress disorder: A meta-analysis of direct comparisons. *Clinical Psychology Review, 28,* 746-758.

What Works in Therapy:
Pop Quiz

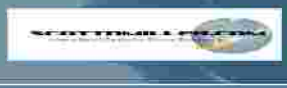
Question #5:

Consumer ratings of the alliance are better predictors of retention and outcome than clinician ratings.

True

~~Remember the Alamo!~~

Remember Project MATCH



What Works in Therapy:
Project MATCH and the Alliance

- The largest study ever conducted on the treatment of problem drinking:
  - Three different treatment approaches studied (CBT, 12-step, and Motivational Interviewing).
- *NO* difference in outcome between approaches.
- The client's rating of the therapeutic alliance the best predictor of:
  - Treatment participation;
  - Drinking behavior during treatment;
  - Drinking at 12-month follow-up.

Project MATCH Group (1997). Matching alcoholism treatment to client heterogeneity. *Journal of Studies on Alcohol, 58*, 7-29.
Babor, T.F., & Del Boca, F.K. (eds.) (2003). *Treatment matching in Alcoholism*. Cambridge University Press: Cambridge, UK.
Connors, G.J., & Carroll, K.M. (1997). The therapeutic alliance and its relationship to alcoholism treatment participation and outcome. *Journal of Consulting and Clinical Psychology, 65*(4), 588-98.

What Works in Therapy:
Pop Quiz

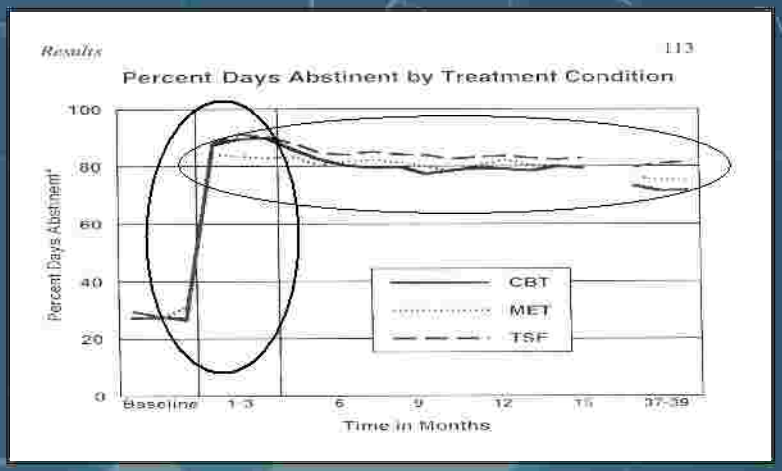
Question #6:

The bulk of change in successful treatment occurs earlier rather than later.

True

If a particular approach, delivered in a given setting, by a specific provider is going to work, there should measurable improvement in the first six weeks of care.

What Works in Therapy:
Project MATCH and Outcome

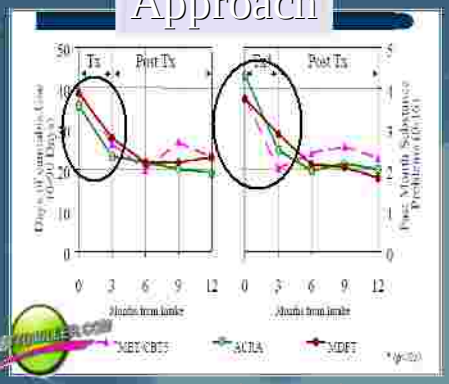


Babor, T.F., & DelBoca, F.K. (eds.) (2003). *Treatment Matching in Alcoholism.* United Kingdom: Cambridge, 113.

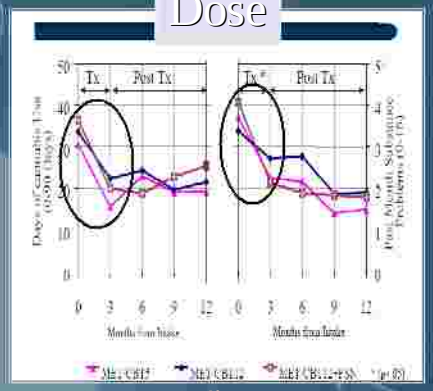
What Works in Therapy:
More Research on Outcome

Cannabis Youth Treatment Project
Cultivating Good Buds

Approach



Dose



http://www.chestnut.org/LI/Posters/CYT_%20MF_APA.pdf

What Works in Therapy:
Pop Quiz

Last Question!

The best way to insure effective, efficient, ethical and accountable treatment practice is for the field to adopt and enforce:

- •Evidence-based practice;
- •Quality assurance;
- •External management;
- •Continuing education requirements;
- •Legal protection of trade and terminology.

False

What Works in Therapy:
A Tale of Two Solutions...

The Medical Model:

Evidence-based Practice

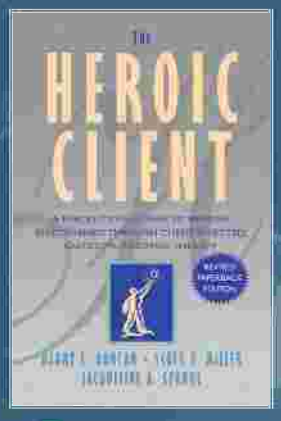
- Diagnosis-driven, "illness model"
- Prescriptive Treatments
- Emphasis on quality and competence
- Cure of "illness"

The Contextual Model

Practice-based Evidence

- Client-directed (Fit)
- Outcome-informed (Effect)
- Emphasis on benefit over need
- Restore real-life functioning

What Works in Therapy:
First Step

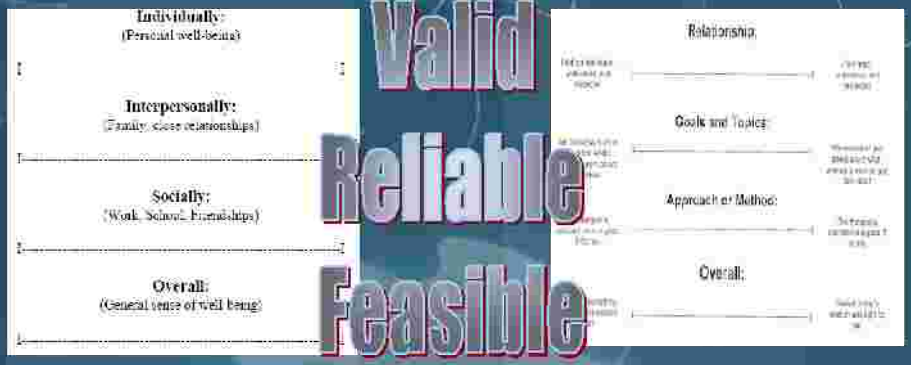


- Formalizing what experienced therapists do on an ongoing basis:
  - *Assessing and adjusting fit for maximum effect*.

Duncan, B.L., Miller, S.D., & Sparks, J. (2004). *The Heroic Client* (2nd Ed.). San Francisco, CA: Jossey-Bass.

What Works in Therapy:

Integrating Formal Client Feedback into Care



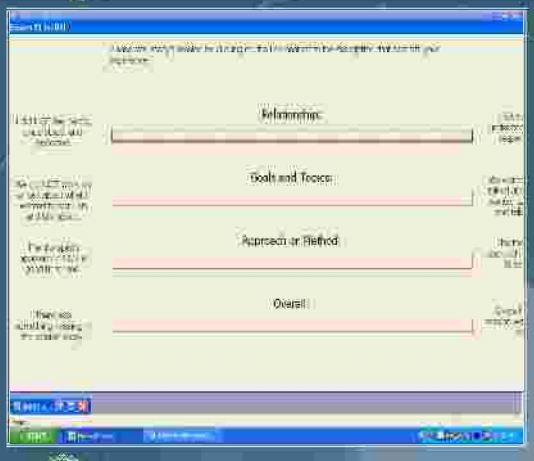
The O.R.S

The S.R.S

Download free working copies at:
http://www.scottdmiller.com/

What Works in Therapy:

Integrating Formal Client Feedback into Care

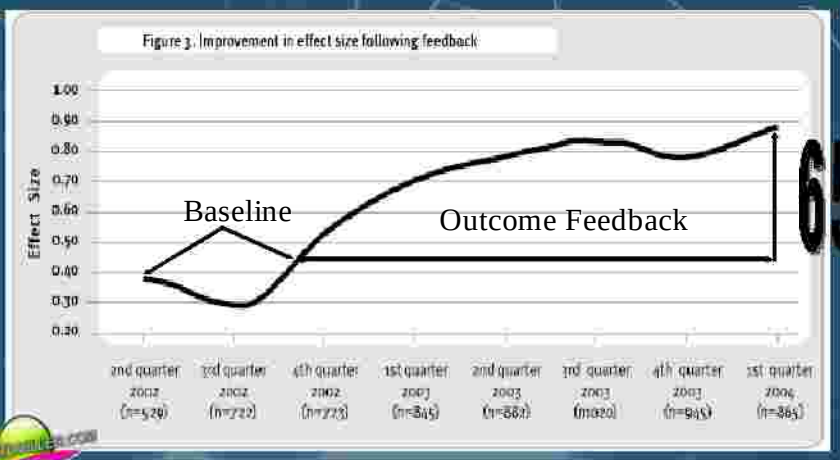


- Cases in which therapists "opted out" of assessing the alliance at the end of a session:
  - *Two times more likely for the client to drop out;*
  - *Three to four times more likely to have a negative or null outcome.*

Miller, S.D., Duncan, B.L., Sorrell, R., & Brown, G.S. (February, 2005). The Partners for Change Outcome Management System. *Journal of Clinical Psychology*, *61*(2), 199-208.

What Works in Therapy:

Integrating Formal Client Feedback into Care



Miller, S.D., Duncan, B.L., Sorrell, R., Brown, G.S., & Chalk, M.B. (2006). Using outcome to inform therapy practice. *Journal of Brief Therapy*, *5*(1), 5-22.

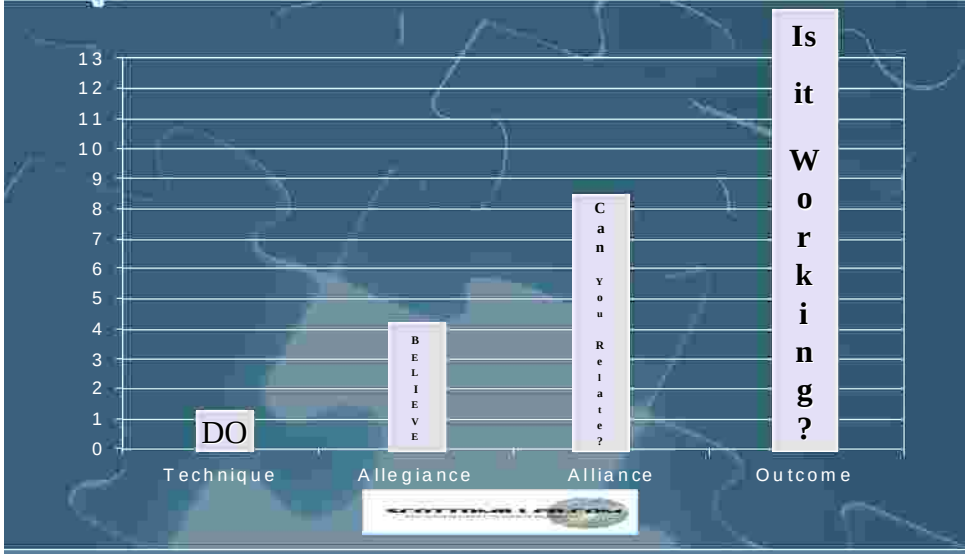
What Works in Therapy:

Integrating Formal Client Feedback into Care

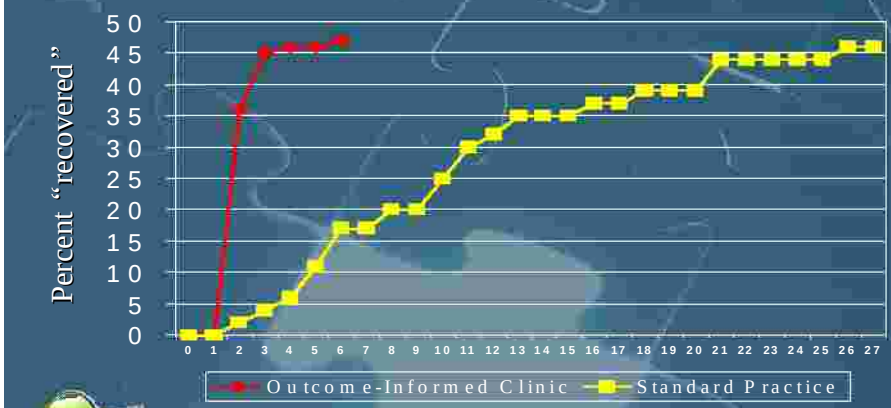
- 461 Norwegian couples seen in marital therapy
- Two treatment conditions:
  - Treatment as Usual (routine marital therapy without feedback);
  - Marital therapy with feedback;
- Groups indistinguishable at the outset of care.
- The percentage of couples in which both meet or exceed the target or better:
  - *Treatment as usual: 17%*
  - *Treatment with feedback: 51%*
  - *Feedback: 50% less separation/divorce*

Anker, M., Duncan, B., & Sparks, J. (2009). The effect of feedback on outcome in Marital therapy. *Journal of Consulting and Clinical Psychology*, *77*(4), 693-704.

What Works in Therapy:
A Question of Focus



What Works in Therapy:
More Research on Feedback



Lambert, M.J., Okiishi, J.C., Finch, A.E., Johnson, L.D. Outcome assessment: From conceptualization to implementation. *Professional Psychology: Research and Practice*. *29*(1), Feb 1998, 63-70

Shifting from Process to Outcome:
Everyone Wins

Consumers:	Clinicians:	Payers:
Individualized care	Professional autonomy	Accountability
Needs met in the most effective and efficient manner possible (value-based purchasing)	Ability to tailor treatment to the individual client(s) and local norms	Efficient use of resources
Ability to make an informed choice regarding treatment providers	Elimination of invasive authorization and oversight procedures	Better relationships with providers and decreased management costs
A continuum of possibilities for meeting care needs	Paperwork and standards that facilitate rather than impede clinical work	Documented return on investment

Putting "What Works" to work in Therapy:
Three Steps

1. Create a "Culture of feedback";
2. Integrate alliance and outcome feedback into clinical care;
3. Learn to "fail successfully."

What Works in Therapy:
Creating a "Culture of Feedback"

Outcome Rating Scale (ORS)

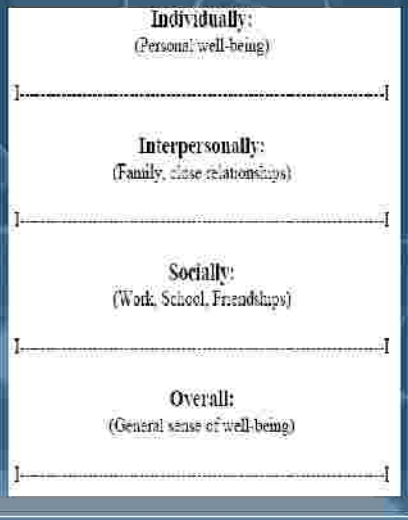
Name: Age: (Yrs.):
ID#: Sex: M / F
Session #: Date:

Looking back over the last week, including today, help us understand how you have been feeling by making how well you have been doing in the following areas of your life, where marks to the left represent low levels and marks to the right indicate high levels.

- When scheduling a first appointment, provide a rationale for seeking client feedback regarding outcome.
  - *Work a little differently;*
  - *If we are going to be helpful should see signs sooner rather than later;*
  - *If our work helps, can continue as long as you like;*
  - *If our work is not helpful, we'll seek consultation (session 3 or 4), and consider a referral (within no later than 8 to 10 visits).*

What Works in Therapy:
Measuring Outcome

- *Give at the beginning of the visit;*
- *Client places a hash mark on the line.*
- *Each line 10 cm (100 mm) in length.*


Individually:
(Personal well-being)

I----------I

Interpersonally:
(Family, close relationships)

I----------I

Socially:
(Work, School, Friendships)

I----------I

Overall:
(General sense of well-being)

I----------I

- *Scored to the nearest millimeter.*
- *Add the four scales together for the total score.*

Child Outcome Rating Scale (CORS)

Name _____ Age (Yrs): ____
Sex: M / F
Session # _____ Date: _____

How are your doing? How are things going in your life? Please make a mark on the scale to let us know. The closer to the smiley face, the better things are. The closer to the frowny face, things are not so good.

Me
(How am I doing?)

Family
(How are things in my family?)

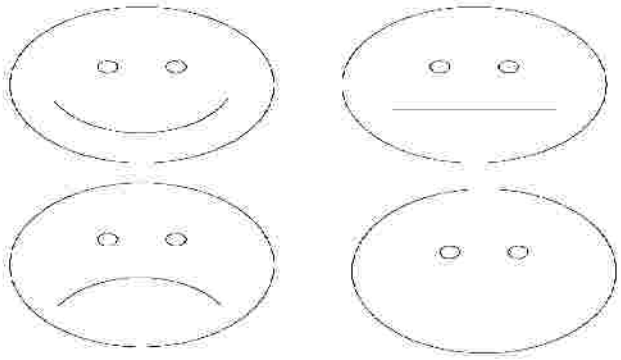
School
(How am I doing at school?)

Everything
(How is everything going?)

Young Child Outcome Rating Scale (YCORS)

Name _____ Age (Yrs): ____
Sex: M / F
Session # ____ Date: _____

Choose one of the faces that show how things are going for you. Or, you can draw one below that is just right for you.

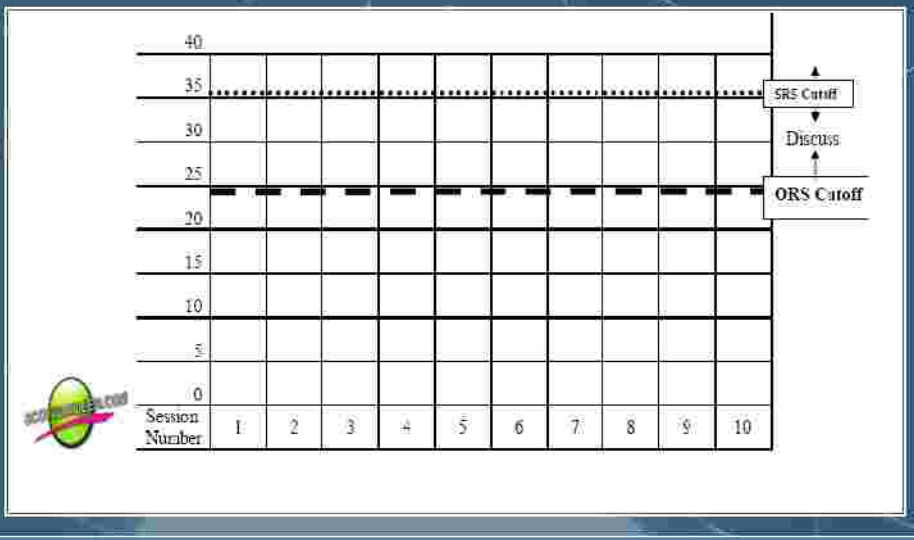


© 2003, Barry L. Duncan, Scott D. Miller, Andy Huggins, and Jacqueline A. Sparks

Duplicate ground only

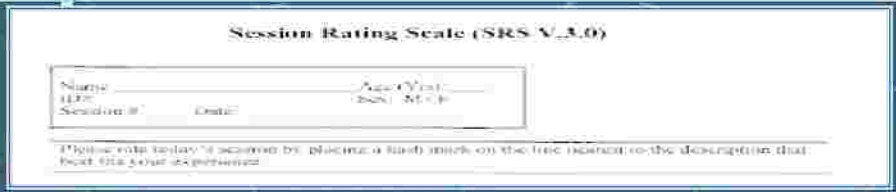
What Works in Therapy:

Creating a "Culture of Feedback"



What Works in Therapy

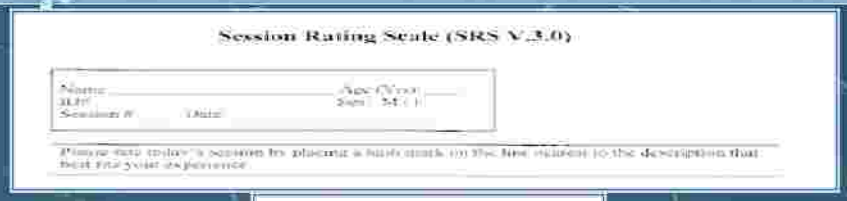
Linking Treatment to Outcome


Session Rating Scale (SRS V_3.0)

- When scheduling a first appointment, provide a rationale for seeking client feedback regarding the alliance.
  - *Work a little differently;*
  - *Want to make sure that you are getting what you need;*
  - *Take the "temperature" at the end of each visit;*
  - *Feedback is critical to success.*
- Restate the rationale at the beginning of the first session and prior to administering the scale.

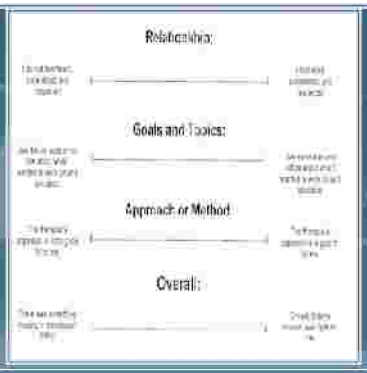
What Works in Therapy

Linking Treatment to Outcome


Session Rating Scale (SRS V.3.0)

Name _____ Age (Yrs) _____
ID# _____ Sex: M ( ) F ( )
Session # _____ Date: _____

Please mark below to indicate how you felt during our session today.


Relationship:

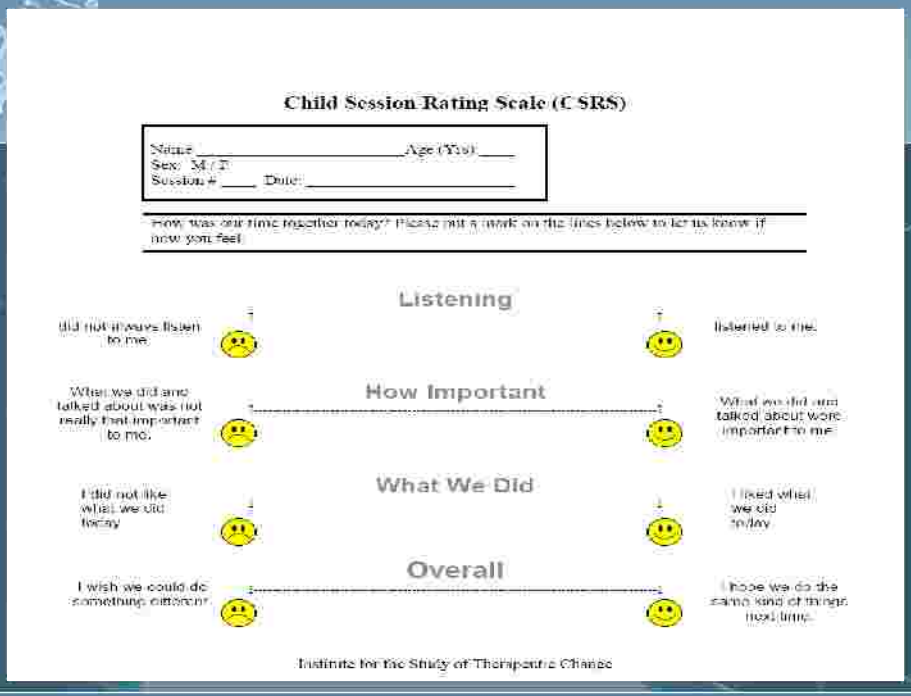
Goals and Topics:

Approach or Method:

Overall:

- *Give at the end of session;*
- *Each line 10 cm in length;*

- *Score in cm to the nearest mm;*
- *Discuss with client anytime total score falls <u>below</u> 36*


Child Session Rating Scale (C SRS)

Name _____ Age (Yrs) ____
Sex: M / F
Session # ____ Date: _____

How was our time together today? Please put a mark on the lines below to let us know if now you feel

Listening

I did not always listen to me

I listened to me.

How Important

What we did and talked about was not really that important to me.

What we did and talked about were important to me

What We Did

I did not like what we did today

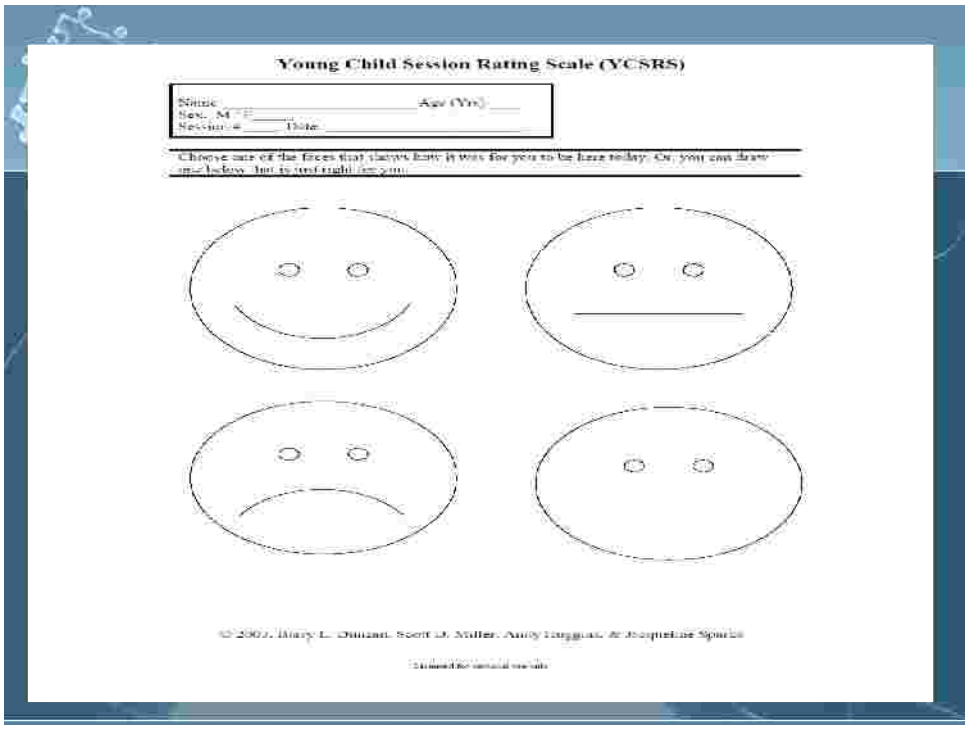
I liked what we did today

Overall

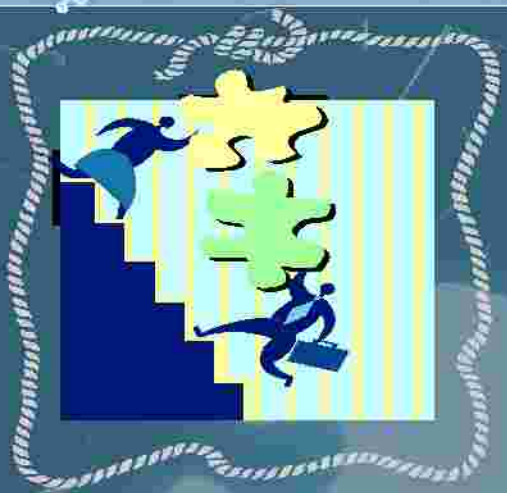
I wish we could do something different

I hope we do the same kind of things next time.

Institute for the Study of Therapeutic Change



What Works in Therapy



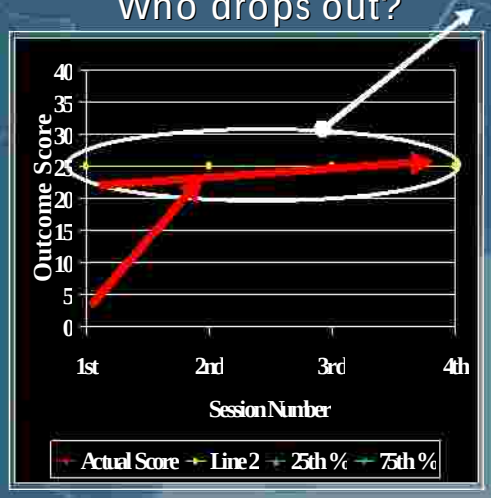
Step Two:

Integrating Feedback into Care

SCOTTDMILLER.COM

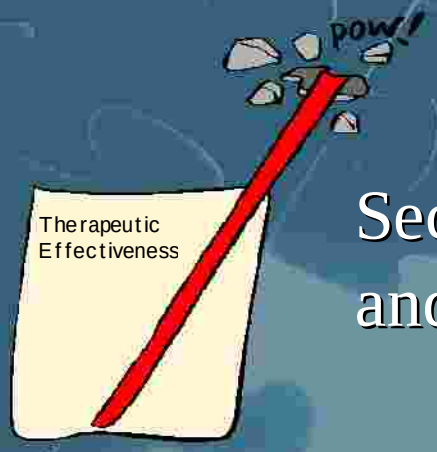
What Works in Therapy:
Integrating Outcome into Care

Who drops out?



- The dividing line between a clinical and "non-clinical" population (25; Adol. 28; kids 30).
- Basic Facts:
  - *Between 25-33% of clients score in the "non-clinical" range.*
  - *Clients scoring in the non-clinical range tend to get worse with treatment.*
- The slope of change decreases as clients approach the cutoff.

What Works in Therapy:
Integrating Outcome into Care



Second session and beyond…

What Works in Therapy:
Integrating Outcome into Care

- What should the clinician do when the client's scores are better (or worse) than the previous session?
- *It depends…*
  - On the magnitude of the change.
  - On when the change takes place.

What Works in Therapy:
Integrating Outcome into Care

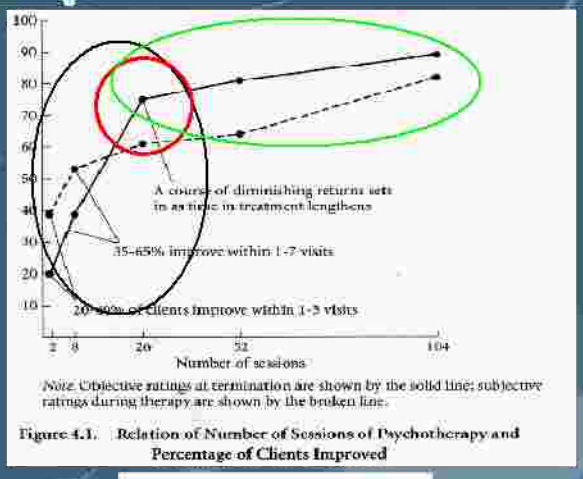
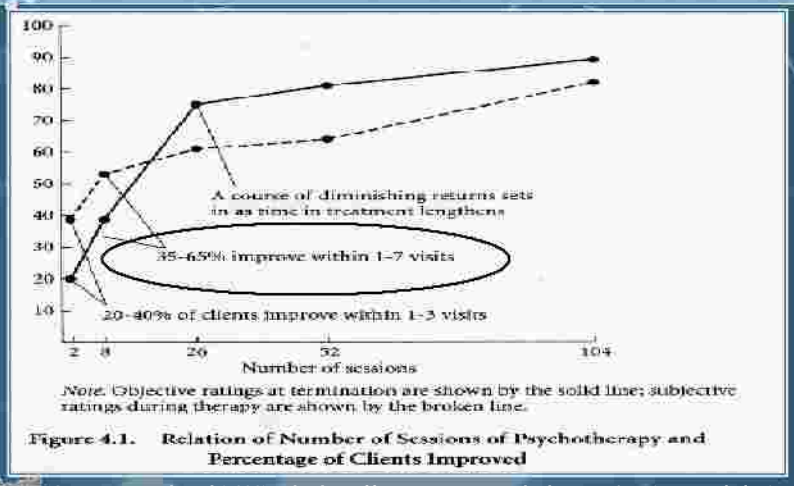


Figure 4.1. Relation of Number of Sessions of Psychotherapy and Percentage of Clients Improved

- Do not change the dose or intensity when the slope of change is steep.
- Begin to space the visits as the rate of change lessens.
- See clients as long as there is meaningful change & they desire to continue.

What Works in Therapy:
Integrating Outcome into Care



Note. Objective ratings at termination are shown by the solid line; subjective ratings during therapy are shown by the broken line.

Figure 4.1. Relation of Number of Sessions of Psychotherapy and Percentage of Clients Improved

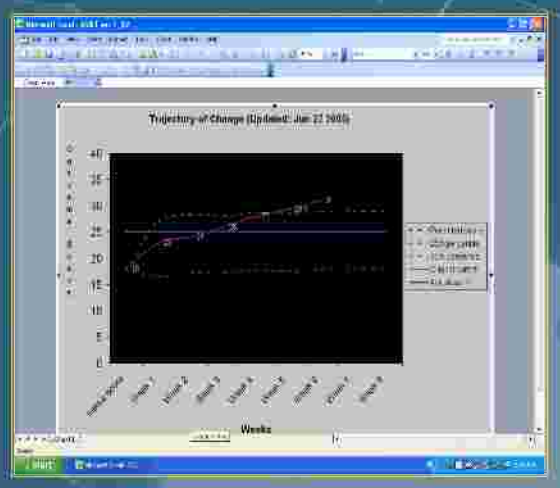
Source: Howard, et al (1986). The dose effect response in psychotherapy. *American Psychologist, 41*(2), 159-164.

What Works in Therapy:
Integrating Outcome into Care

- The Reliable Change Index (RCI):
  - The average amount of change in scores needed in order to be attributable to treatment *regardless of the persons score on the ORS at intake.*
  - On the ORS, the RCI = 5 points.
  - The benefit is simplicity; the problem is:
    - *The RCI underestimates the amount of change required to be considered reliable for people scoring lower at intake;*
    - *The RCI overestimates the amount of change required to be considered reliable for people scoring higher at intake.*

When is Change Reliable?

Two Methods



- Algorithm-driven "trajectories of change":
  - *Uses linear regression to plot client-specific trajectories;*
  - *Depicts the amount of change in scores needed to be attributable to treatment.*

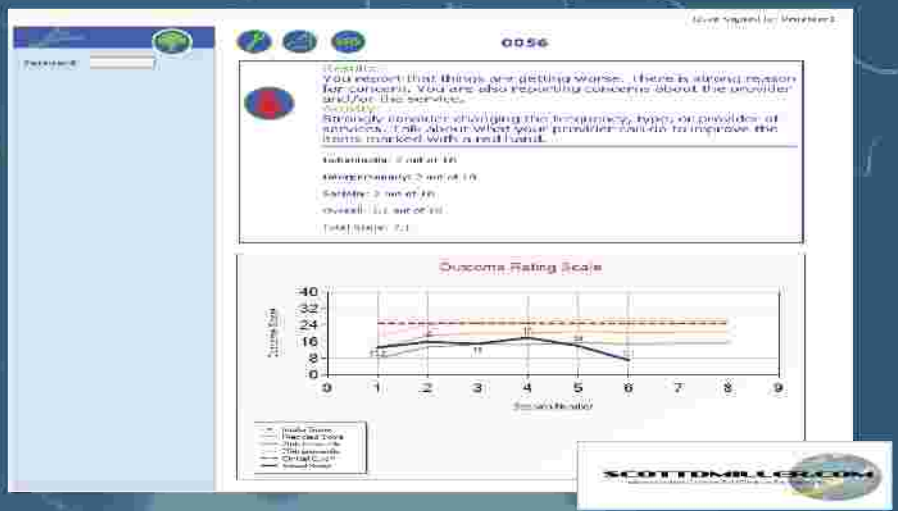
What Works in Therapy:

Integrating Outcome into Care

www.talkingcure.com/training.asp?id=108

What Works in Therapy:
Integrating Outcome into Care

What Works in Therapy:
Integrating Outcome into Care

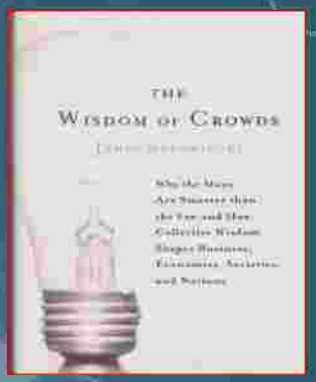


What Works in Therapy:
Integrating Outcome into Care

- In 1906, 85 year old British Scientist Sir Francis Galton attends a nearby county fair;
- Happens on a weight judging competition:
  - People paid a small fee to enter a guess.
- Discovers that the average of all guesses was significantly closer than the winning guess!

What Works in Therapy:
Integrating Outcome into Care

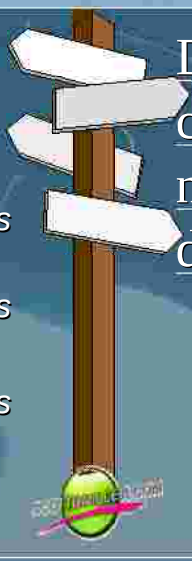
"Therapists typically are not cognizant of the trajectory of change of patients seen by therapists in general…that is to say, they have no way of comparing their treatment outcomes with those obtained by other therapists."



Wampold, B., & Brown, J. (2006). Estimating variability in outcomes attributable to therapists: A naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology, 73* (5), 914-923.

What Works in Therapy:
Integrating Outcome into Care

- Outcome of treatment varies depending on:
  - *The unique qualities of the client;*
  - *The unique qualities of the therapist;*
  - *The unique qualities of the context in which the service is offered.*



Directions for change when you need to change directions:

- What: 1%
- Where: 2-3%
- Who: 8-9%

What Works in Therapy:
Integrating Outcome into Care

1. *What does the person want?*
2. *Why now?*
3. *How will the person get there?*
4. *Where will the person do this?*
5. *When will this happen?*

Miller, S.D., Mee-Lee, D., & Plum, W. (2005). Making treatment count. *Psychotherapy in Australia*, *10*(4), 42-56,

What Works in Therapy:
Integrating Outcome into Care

Collaborative Teaming & Feedback

When?

- *At intake;*
- *"Stuck cases" day;*

How?

- *Client and/or Therapist peers observe "live" session;*
- *Each reflects individual understanding of the alliance sought by the client.*
- *Client feedback about reflections used to shape or reshape service delivery plan.*

SCOTTDMILLER.COM

What Works in Therapy

Step Three:

Learning to Fail Successfully

SCOTTDMILLER.COM

What Works in Therapy:
Learning to "Fail Successfully"

- Drop out rates range from 20-80% with an average of 47%:
  - Approximately half of people who drop out report a reliable change.
  - Importantly, the data indicate that had they stayed a few more sessions:
    - *More change;*
    - *Change more durable.*

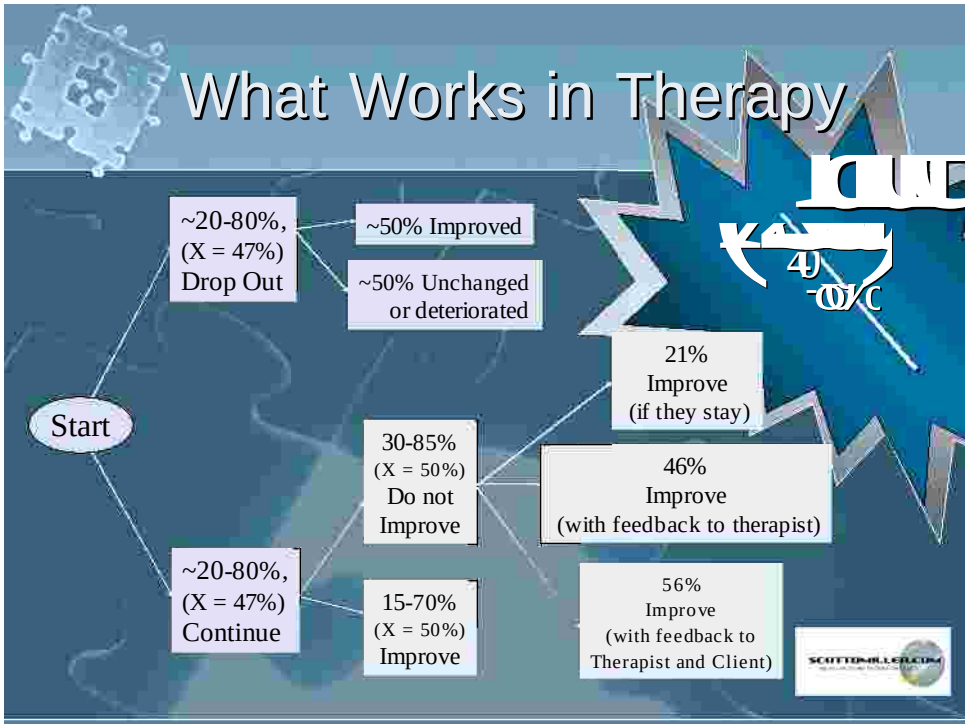
Lambert, M.J., Whipple, J., Hawkins, E., Vermeersch, D., Nielsen, S., & Smart, D. (2004). Is it time for clinicians routinely to track client outcome? A meta-analysis. *Clinical Psychology, 10*, 288-301.
Chasson, G. (2005). Attrition in child treatment. *Psychotherapy Bulletin, 40*(1), 4-7.

What Works in Therapy:
Learning to "Fail Successfully"

- Of those who stay in care:
  - Studies indicate between 15-70% achieve a reliable change in functioning.
- Said another way:
  - Therapists are likely to fail with 30-85% of people treated.

Anker, M., Duncan, B., & Sparks, J. (in press). Does client based feedback improve outcomes in couples therapy? *Journal of Consulting and Clinical Psychology.*
Hansen, N., Lambert, M.J., & Forman, E. (2002). The psychotherapy does-response effect and its implications for treatment service delivery. *Clinical Psychology, 9*(3), 329-343.

What Works in Therapy



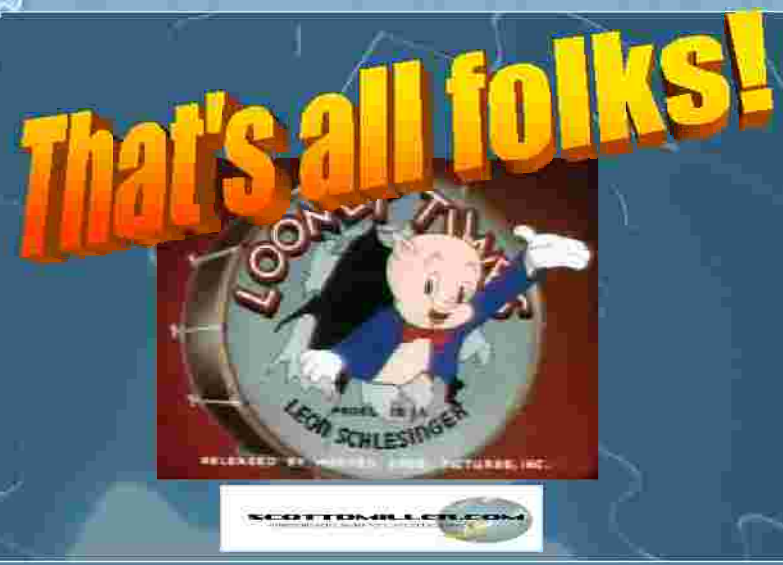
The "Random Walk" in Psychotherapy

- In 2000, Burton Malkiel shows how a broad portfolio of stocks selected at random will match the performance of one carefully chosen by experts.
  - Dividend yields: Pros 1.2%; Darts 2.3%, DJIA 3.1%.
- Similarly, research shows there is little or no correlation between a therapy with poor outcome and the likelihood of success in the next therapy.

Liang, B. (Liang, B. (1999). Price pressure: Evidence from the 'dartboard column." *Journal of Business, 71*(1). Liang, B. (1996). The 'dartboard column:" The pros, the darts, and the market. http://ssrn.com/abstract=1068.

What Works in Therapy:
Review

- Call for:
  - Accountability;
  - Measurable outcomes;
  - Efficient use of resources;
  - Documented "return on investment"

- The response:
  - Practice-based practice;
  - Training and supervision targeted to outcomes of individual therapists and programs;
  - Continuous monitoring and real-time utilization of outcome data;
  - Treatment planning and programs structured and informed by local norms and algorithms.
  - Regulatory bodies use outcome data for value-based oversight and purchasing of treatment services.

The Heart and Soul of Change