The Transtheoretical Model to Help Clients Thrive

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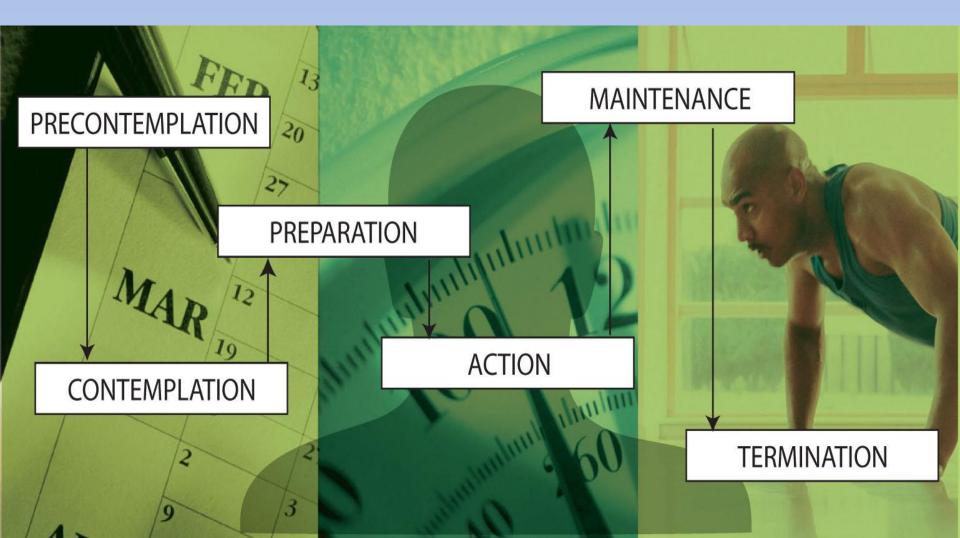
Founder Pro-Change Behavior Systems, Inc. Recovery from Mental and Substance Abuse Disorders: a voluntary and individually driven process of change through which individuals work to improve their own health and well-being, live a productive life, and welcome opportunities for growth.

SAMSHA, Substance Abuse and Mental Health Services Administration, (2011) ROSC committee, Recovery Definition and Guiding Principles. <u>http://www.samhsa.gov/recovery/</u>

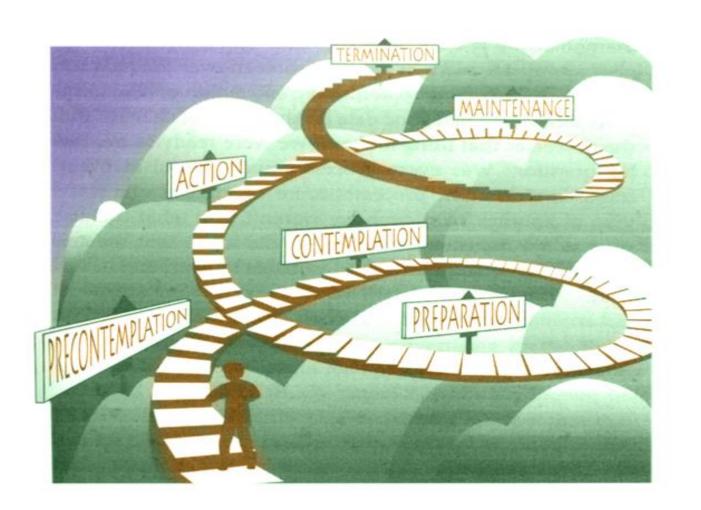
Recovery is holistic and exists on a continuum of improved health and wellness.

SAMSHA, 2011

Stages of Change



Stages of Change



Engagement and Intervention Issues

- Reach
- Retain
- Progress
- Process
- Success

Programs have to communicate that they are tailored to needs of each patient:

1. Wherever you are at, we can work with that!

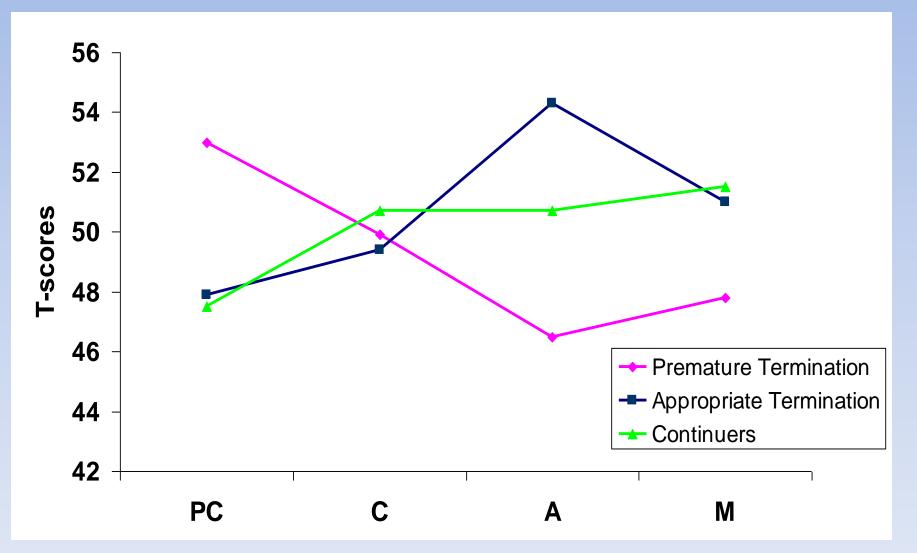
 Traffic light: Red light not ready; Yellow light getting ready; Green light ready.



Proactive alone will not work

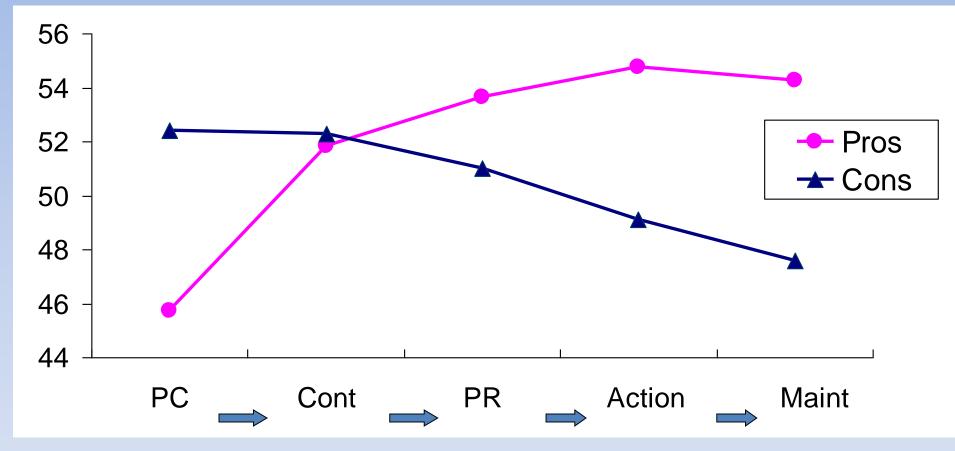
A. Kaiser example with smoking

Stage Profiles of Completers and Dropouts of Psychotherapy



Brogan, MM, Prochaska, JO & Prochaska, JM. (1999). Predicting termination and continuation status in psychotherapy using the transtheoretical model. *Psychotherapy*, 36, 105-113.

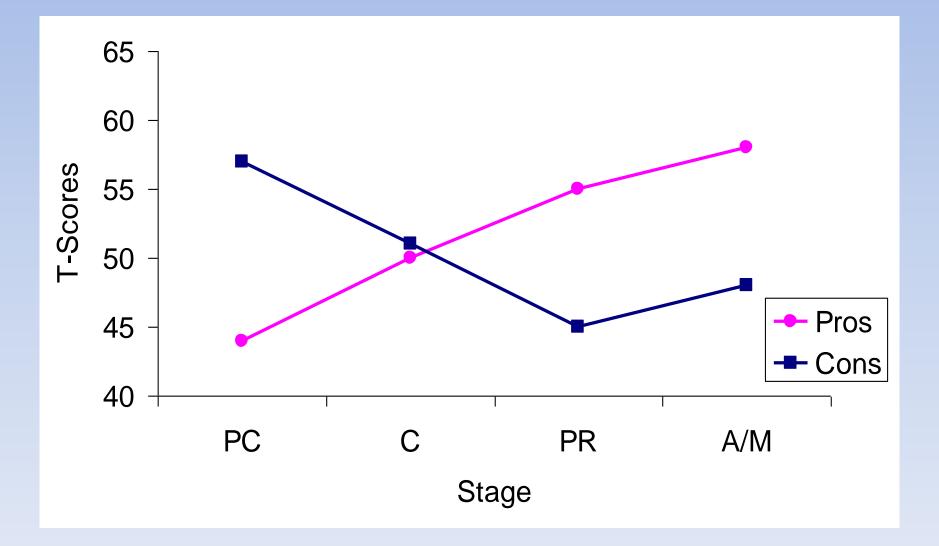
Stage Transitions



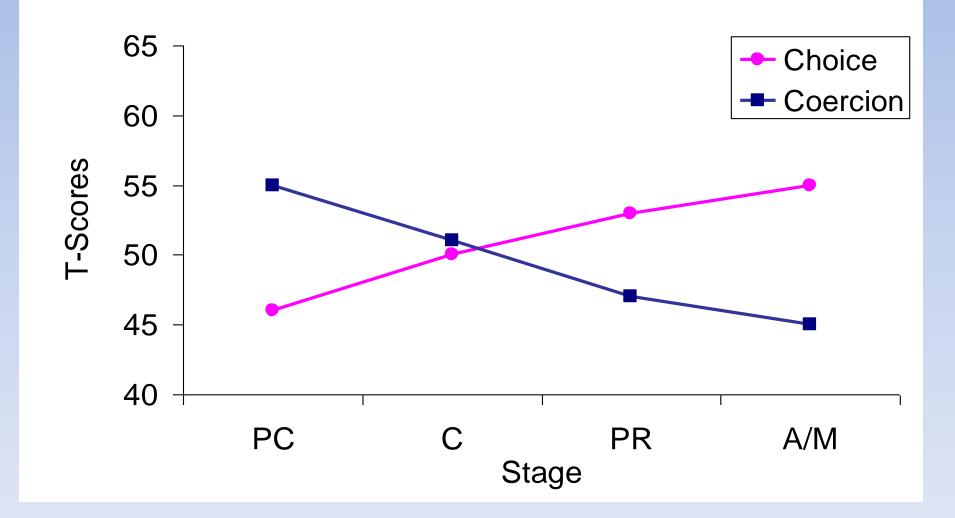
The pros and cons of changing across stages of change for 48 behaviors

Hall, K. L. & Rossi, J. S. (2008). Meta-analytic examination of the strong and weak principles across 48 health behaviors. *Preventive Medicine*, *46*, 266-274.

Decisional Balance of Drug Addiction Treatment Across Stage



Perceived Coercion and Choice Over Participating In Drug Addiction Treatment Across Stage



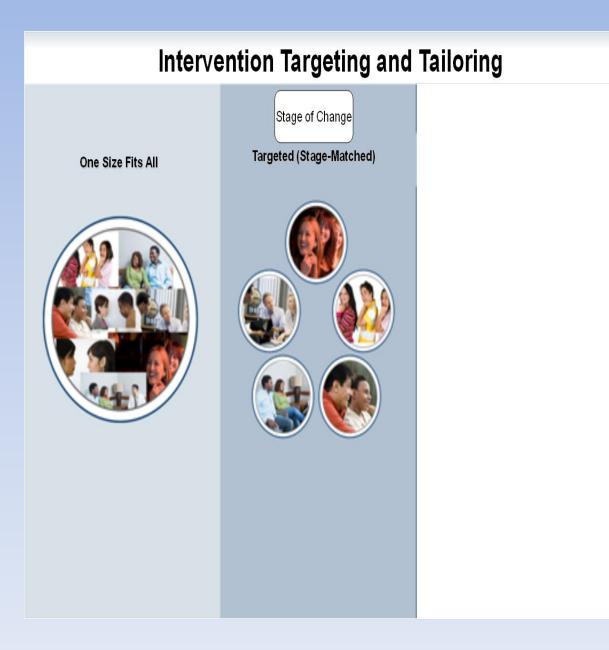
When social controls (including incentives) are used, programs have to help transform social controls into self controls.

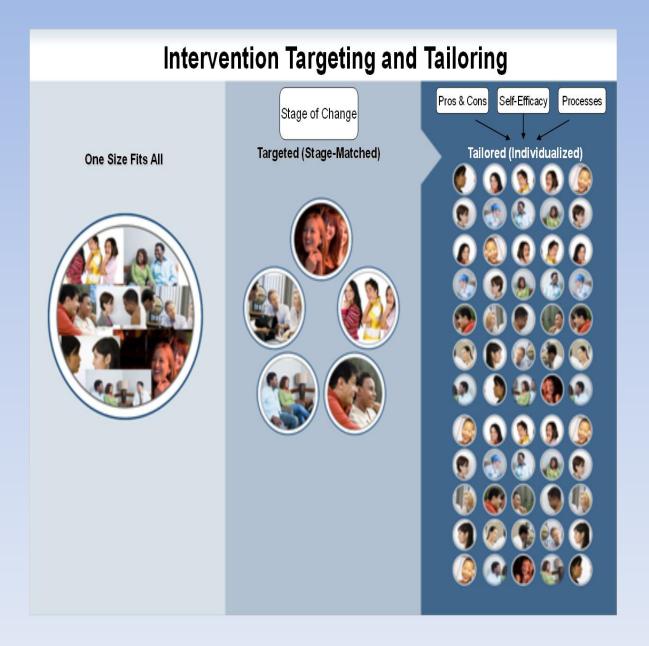
• Air Force example with smoking

Intervention Targeting and Tailoring

One Size Fits All

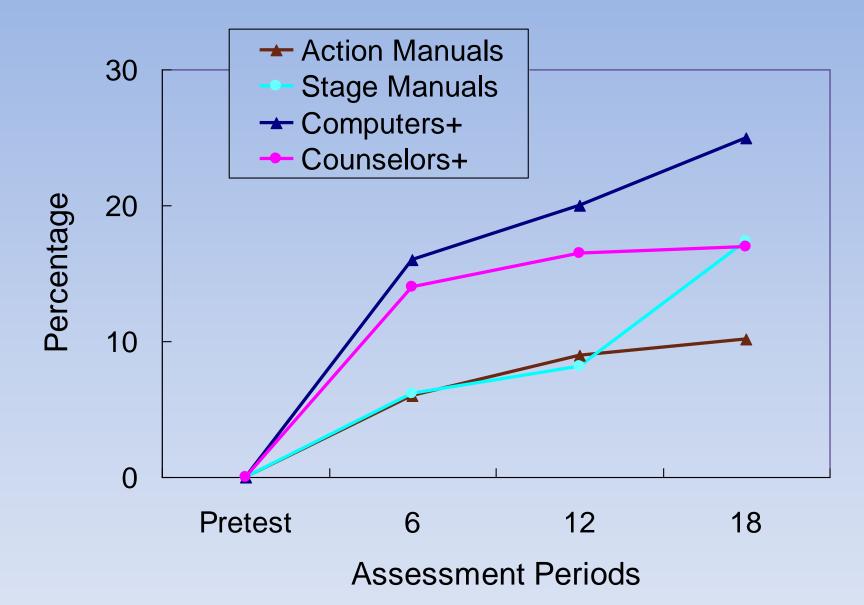






Treatment Groups

- 1. Action-oriented Manuals
- 2. Stage-Matched Manuals
- 3. Stage-Matched Computers & Manuals
- 4. Counselors & Stage-MatchedComputers



Prochaska, JO, DiClemente, CC, Velicer, WF & Rossi, JS. (1993). Standardized, individualized, interactive and personalized self-help programs for smoking cessation. *Health Psychology*, 12, 399-405.

Partner Abuse: Six Month Follow-up with First 250 Participants

	Standard Care &	Mandated
Victims Report	3 Individualized Computer Sessions	Standard Group Therapy
1. Threatened to hit or throw something	20%	47%
2. Threw something at me	15%	28%
3. Kicked with force that could hurt	9%	21%
4. Beat me up	3%	23%

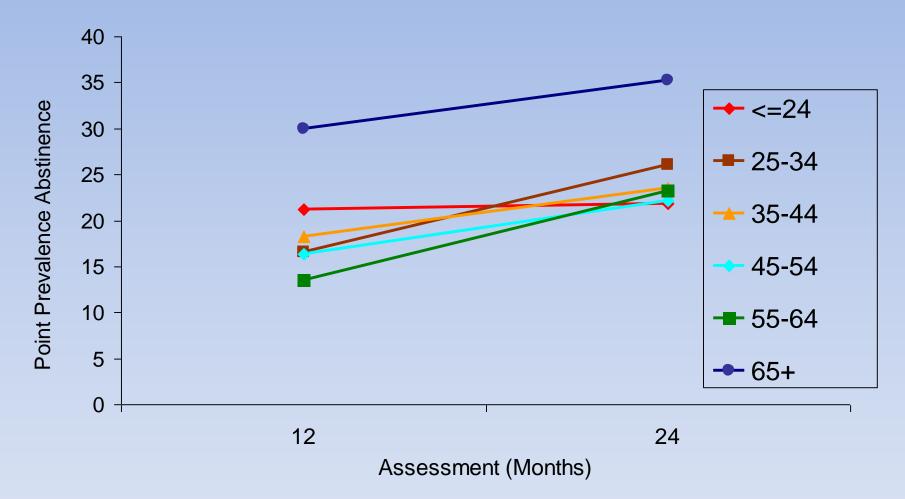
Levesque DA, Ciavatta MM, Castle PH, Prochaska JM, Prochaska JO. (2012)/ Evaluation of a Stage-Based, Computer-Tailored Adjunct to Usual Care for Domestic Violence Offenders. . Psychol Violence., 2(4):368-684.

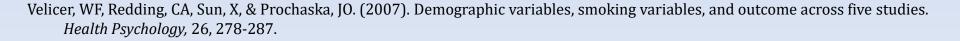
Partner Abuse: Six Month Follow-up with First 250 Participants

	Standard Care &	
	3 Individualized	Mandated Standard
Offender Report	Computer Sessions	Group Therapy
1. Precontemplation Stage	18%	30%
2. Action Stage with Low Relapse Risk	37%	12%
3. Couples Therapy	25%	12%
4. Other Group Therapy	37%	18%
5. Self-help Books	58%	25%
6. Talked to Medical Professional	40%	22%

Levesque DA, Ciavatta MM, Castle PH, Prochaska JM, Prochaska JO. (2012). Evaluation of a Stage-Based, Computer-Tailored Adjunct to Usual Care for Domestic Violence Offenders. . Psychol Violence., 2(4):368-684.







Proactive Cessation With Adolescents in Primary Care

Tailored Intervention

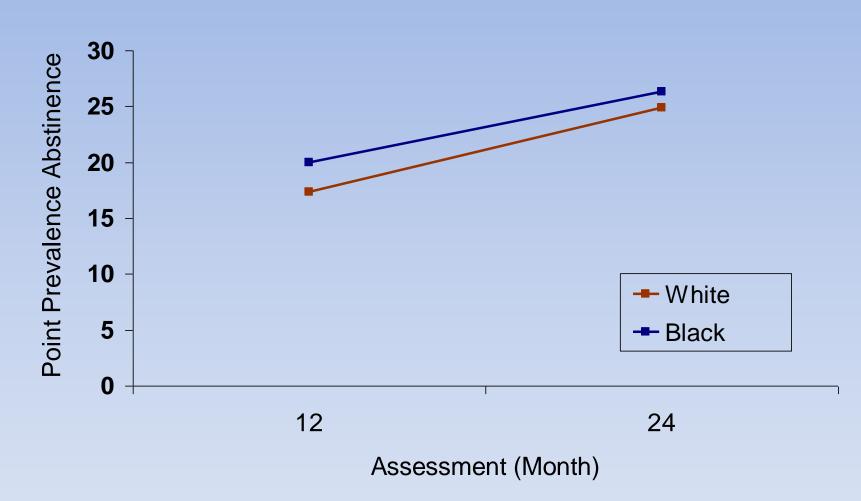
23.9%

Assessment Only

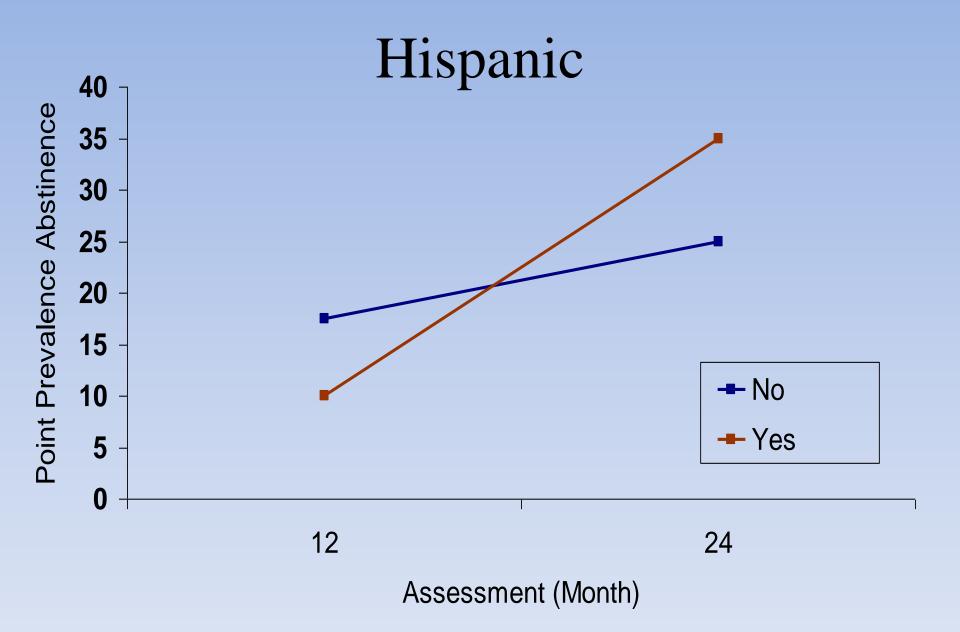
11.4%

Hollis, JF, Polen, MR, Whitlock, EP; Lichtenstein, E., Mullooly, JP, Velicer, W.F., & Redding, C.A. (2005). TEEN REACH: Outcomes from a randomized controlled trial of a tobacco reduction program among teens seen in primary medical care. *Pediatrics*, *115*, 981-999.

Race



Velicer, WF, Redding, CA, Sun, X, & Prochaska, JO. (2007). Demographic variables, smoking variables, and outcome across five studies. *Health Psychology*, 26, 278-287.



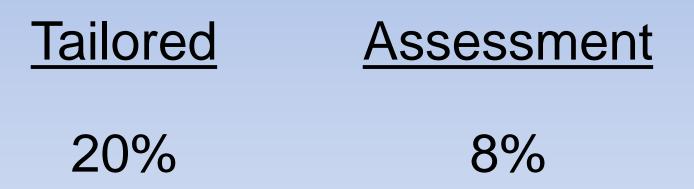
Velicer, WF, Redding, CA, Sun, X, & Prochaska, JO. (2007). Demographic variables, smoking variables, and outcome across five studies. *Health Psychology*, 26, 278-287.

Proactive Cessation with Depressed Patients: Abstinence at 18 Months

TailoredAssessment OnlyIntervention +19.1%

Hall, S. M., Tsoh, J. V., Prochaska, J. J., Eisendrath, S., Humfleet, G. L., Gorecki, J. A. et al. (2006). Treatment for Cigarette Smoking Among Depressed Mental Health Outpatients: A Randomized Clinical Trial. *American Journal of Public Health*, *96*, 1808-1814.

Proactive Cessation with Patients Hospitalized for Mental Illness



Prochaska, J.J., Hall, S., Delucchi, K., & Hall, S.M. (2014). Efficacy of initiating tobacco dependence treatment in inpatient psychiatry: A randomized controlled trial. *American Journal of Public Health*, *104(8)*, 1557-1565.

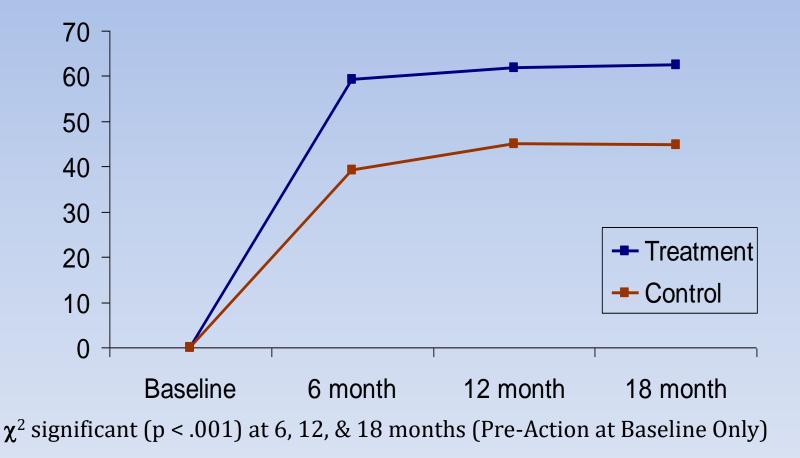
Adding TTM-tailored Interventions to Midwife Counseling with Pregnant Smokers

Adding TTM-tailored interventions produced 8.2 times the impacts of midwife counseling alone

- 1. Increased Recruitment
- 2. Increased Retention
- 3. Increased Efficacy
- 4. Decreased Mis-reporting
- 5. Produced 8.2 times greater impacts

Lawrence, T, Aveyard, P, Cheng, K, Griffin, C, Johnson, C, & Croghan, E. (2005). Does stage-based smoking cessation advice in pregnancy result in long-term quitters? 18-month postpartum follow-up of a randomized controlled trial. *Addiction*, 100 (1), 107-116.

Percentage in Action/Maintenance for Stress Management



Evers, K.E., Prochaska, J.O., Johnson, J.L., Mauriello, L.M., Padula, J.A., & Prochaska, J.M. (2006). A randomized clinical trial of a population- and Transtheoretical model-based stress-management intervention. *Health Psychology*, *25*, 521-529.

Coaction: The increased probability of progressing to Action on a second behavior (e.g. diet) when individuals have progressed to Action on an initial behavior (e.g. smoking).

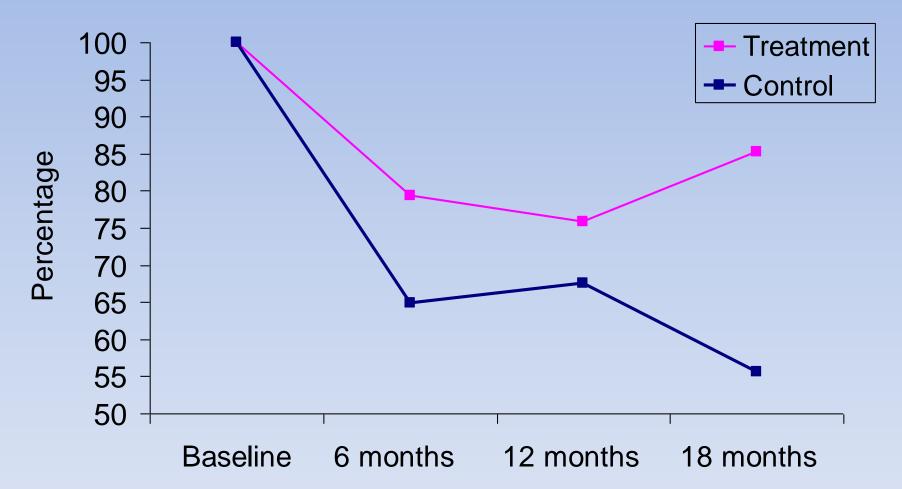
Coaction in

Odds Ratio

Control Group TTM Intervention Group 1.0 1.5-3.5

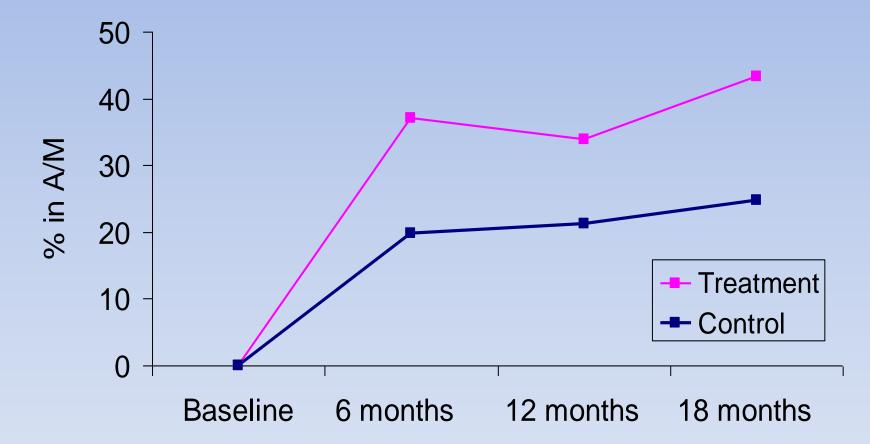
Johnson SS¹, Paiva AL², Mauriello L¹, Prochaska JO², Redding C², Velicer WF. (2014). Coaction in multiple behavior change interventions: consistency across multiple studies on weight management and obesity prevention. Health Psychol, 33(5):475-80. doi: 10.1037/a0034215. Epub 2013 Nov 25.

Adherence: Regression from A/M by Group Post-action at Baseline



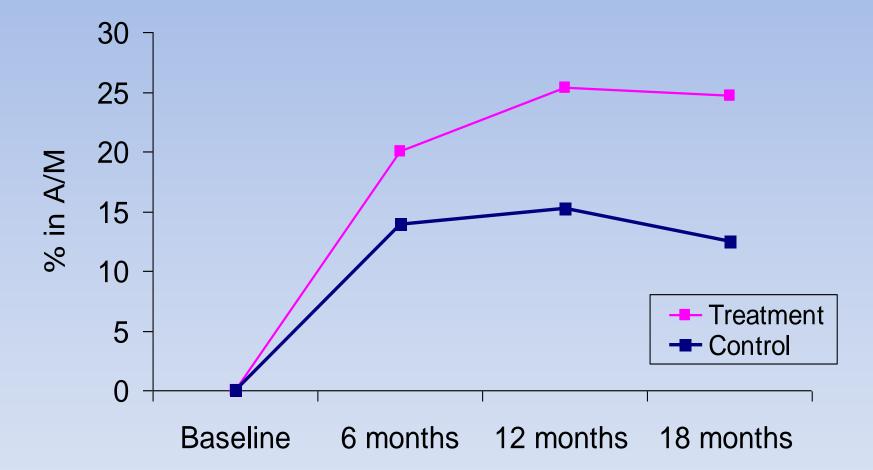
Johnson, SS, Driskell, MM, Johnson, JL, Dyment, SJ, Prochaska, JO, Prochaska, JM, & Bourne, L. (2006). Transtheoretical model intervention for adherence to lipid-lowering drugs. *Disease Management*, 9, 102-114.

Exercise Staging: Adherence Group Progression to A/M by Group (pre-action at baseline)



Johnson, SS, Driskell, MM, Johnson, JL, Dyment, SJ, Prochaska, JO, Prochaska, JM, & Bourne, L. (2006). Transtheoretical model intervention for adherence to lipid-lowering drugs. *Disease Management*, 9, 102-114.

Dietary Fat Staging: Adherence Group Progression to A/M by Group (pre-action at baseline)



Johnson, SS, Driskell, MM, Johnson, JL, Dyment, SJ, Prochaska, JO, Prochaska, JM, & Bourne, L. (2006). Transtheoretical model intervention for adherence to lipid-lowering drugs. *Disease Management*, 9, 102-114.

Two Years of Primary Care Counseling

I. No effects on any of the four target behaviors

II. No increased effect on four behaviors treated effectively with TTM-tailored interventions

Two Years of Worksite Campaign

I. No effects on any of the multiple targeted behaviors

II. No increased effect on multiple behaviors treated effectively with TTM-tailored interventions Costs per health condition and behavior and percentage of successful employees at long-term follow-up who participate in our programs

Health Related Condition	Cost per Employee	Costs per 1,000 employees	% of long-term successes per 1,000 employees
Heart Disease	\$6,000	\$232,000	N/A
Stress	\$4,100	\$2,700,000	65%
Smoking	\$4,000	\$880,000	25%
Diet Risk	\$7,000	\$2,000,000	45%
Exercise Risk	\$3,800	\$1,700,000	45%
Weight Risk	\$3,900	\$1,700,000	30%
Non-adherence: Statins			60%
Non-adherence: Anti- hypertensive			60%
Depression	\$6,400	\$1,900,000	70%

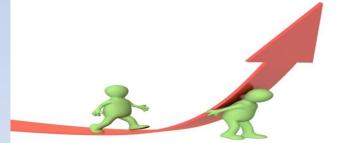
Dr. Alberto Colombi, Medical Director for PPG Industries

Elements of Well-being (2013)

Physical Health
Social Well-being
Community Well-being
Financial Well-being
Purpose

Well-being RCT

- Determine the effects on multiple risks and multiple domains of well-being of Pro-Change's effective LifeStyle Programs:
 - Online program for stress management
 - Telephonic coaching program for exercise management
- 3 group design



Prochaska, J.O., Evers, K.E., Castle, P.H., Johnson, J.L., Prochaska, J.M., Rula, E.Y., Coberley, C., & Pope, J.E. (2012). Enhancing Multiple Domains of Well-being by Decreasing Multiple Health Risk Behaviors: A Randomized Clinical Trial. *Population Health Management*, *15* (*5*), 276-286.

Baseline Demographics

- 39 States represented
- 59% female
- 52% currently employed
- 5.2% full time student
- 42.7% never smoke
- 20% reported no depression

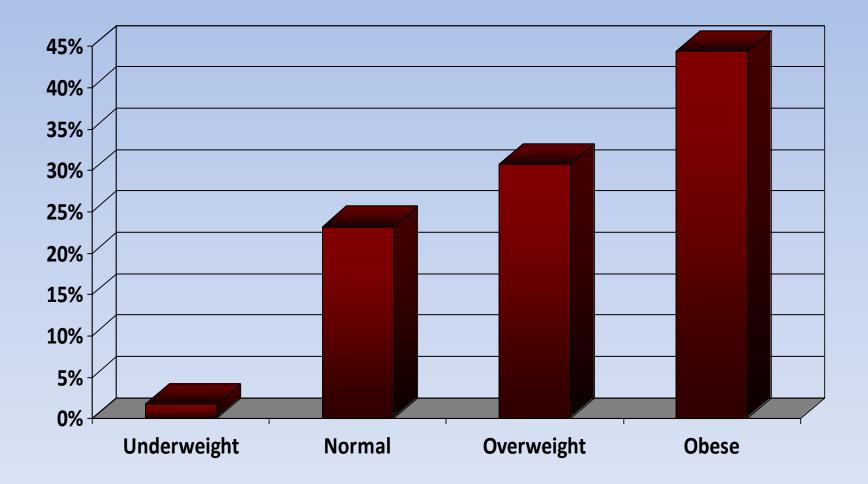
Age: Mean = 48.35 (13.53) Range = 18-86

Chronic conditions:

Mean = 3.74 (3.09) Range = 0-34

Behavior risks: Mean = 4.14 (1.44) Range = 0-9

Baseline Demographics: BMI



Baseline Stage of Change

Regular Exercise

РС	30.2% (1250)
С	32.7% (1354)
PR	27.4% (1132)
А	5.8% (239)
М	3.9% (161)

Stress Management

31.0% (1282)
26.3% (1089)
22.8% (941)
8.1% (336)
11.8% (488)

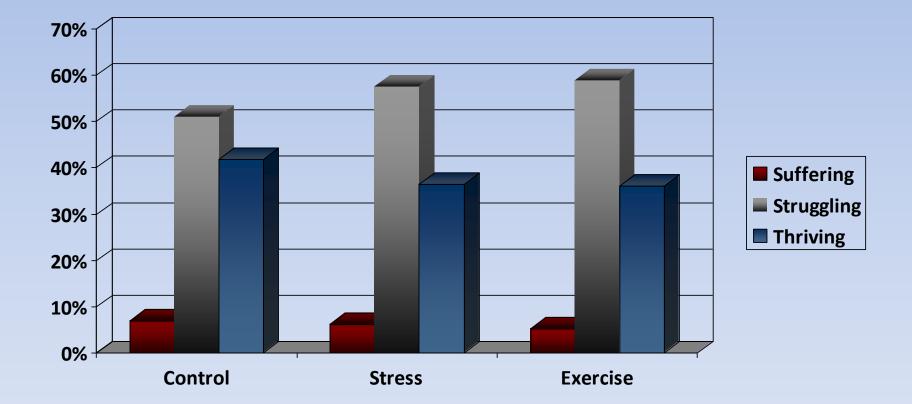
Number of Behavior Risks Mean Differences (T1-T2)

Group	Multiple Imputation
Exercise Coach	-1.18
Stress Online	-0.82
Control	-0.49

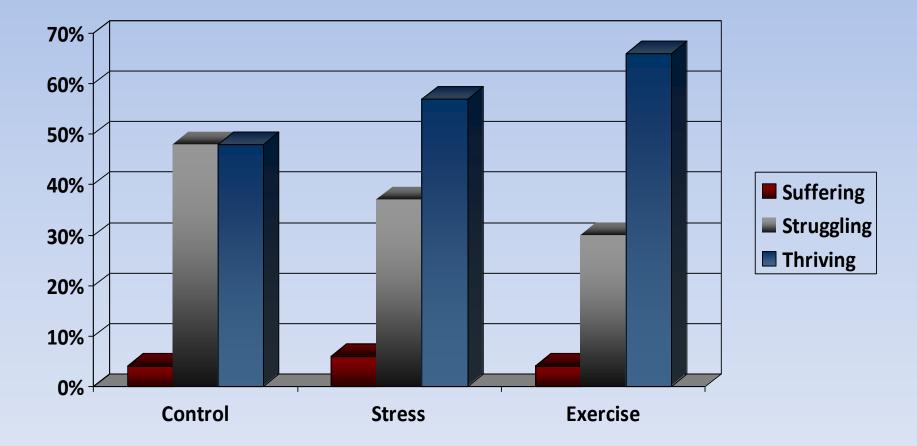
IWBS: Emotional Health Mean Differences (T1-T2)

Group	
Exercise Coach	14.54
Stress Online	12.03
Control	7.75

Life Evaluation Categories:T1



Life Evaluation Categories:T2



Inclusive Care

Inclusive Research + Inclusive Practice

Inclusive Care

Using the Stages of Change to Overcome the Top Threats to Your Health and Happiness

CHANGING TO THRIVE

JAMES O. PROCHASKA, PhD

THE GROUNDBREAKING STAGES OF CHANGE MODEL

JANICE M. PROCHASKA, PhD