MOTIVATIONAL INTERVIEWING TRAINING

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Research

Original Investigation

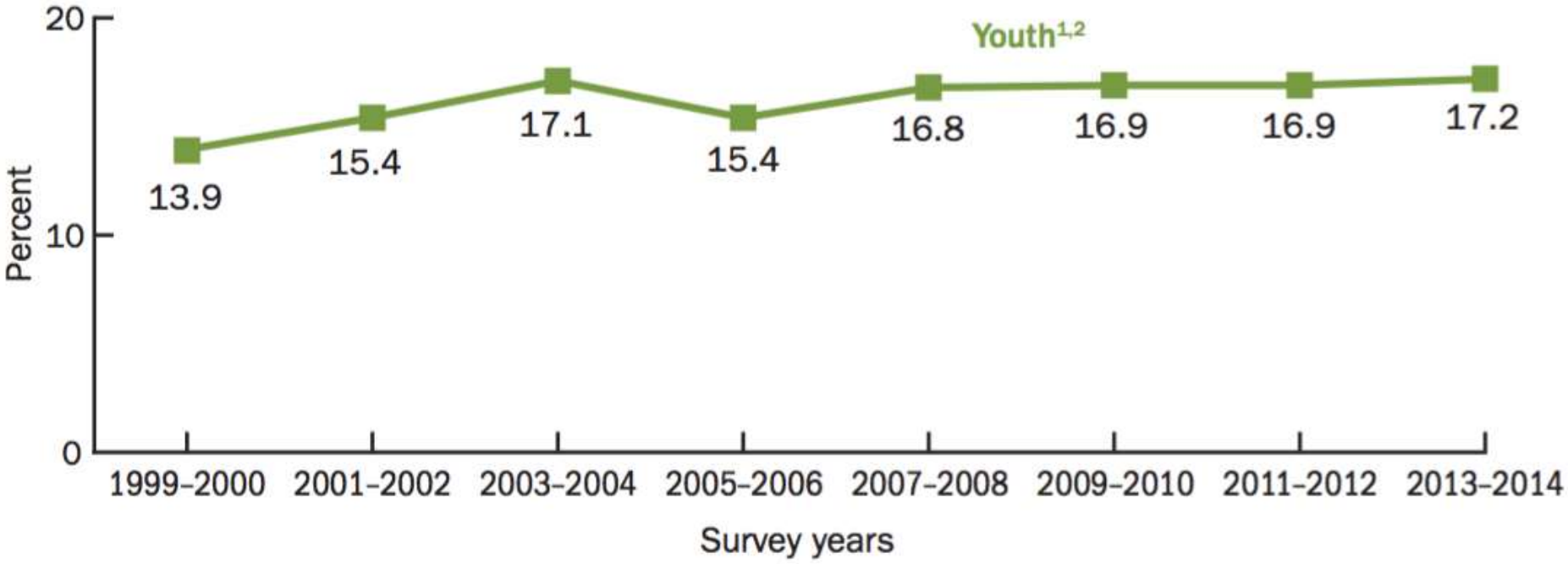
Prevalence and Trends in Obesity and Severe Obesity Among Children in the United States, 1999-2012

Asheley Cockrell Skinner, PhD; Joseph A. Skelton, MD, MS

Table 3. Obesity Prevalence by Age for Females and Males 2 to 19 Years of Age by National Health and Nutrition Examination Survey 2-Year Cycle[a]

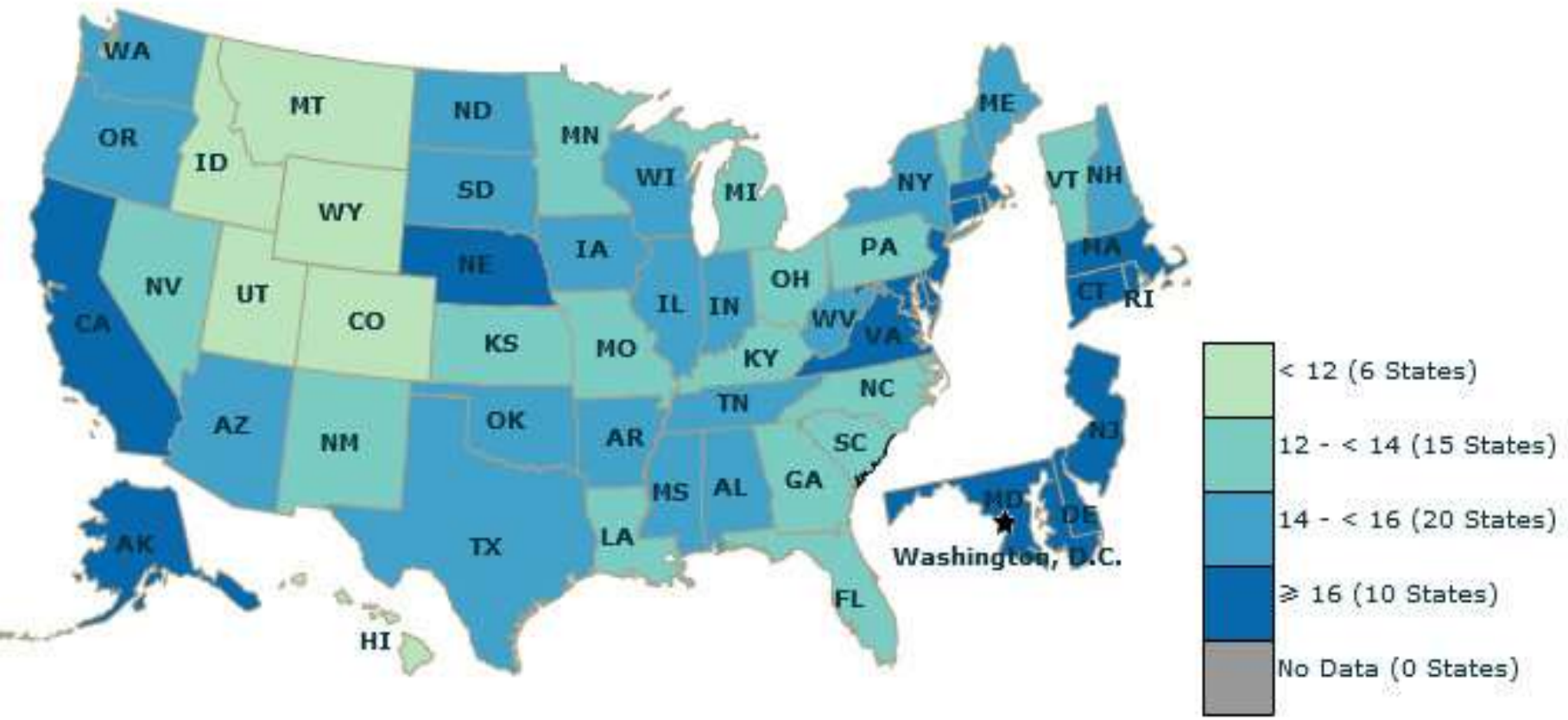
	Overweight				Obesity				Class 2 Obesity				Class 3 Obesity			
	2-18 y	2-5 y	6-11 y	12-19 y	2-18 y	2-5 y	6-11 y	12-19 y	2-18 y	2-5 y	6-11 y	12-19 y	2-18 y	2-5 y	6-11 y	12-19 y
Females																
1999-2000	27.4	21.8	27.3	30.1	14.5	11.1	15.5	15.4	3.8	2.2	3.3	5.1	0.9	0.0	0.6	1.6
2001-2002	29.5	22.4	31.6	31.1	14.0	10.4	14.2	15.4	4.3	2.4	3.3	5.9	1.0	0.3	0.6	1.6
2003-2004	32.8	25.8	37.8	32.3	16.3	13.2	17.8	16.7	4.9	1.7	5.3	6.1	1.6	0.1	1.3	2.4
2005-2006	30.0	21.4	27.9	35.4	15.4	11.5	14.4	17.8	4.5	1.4	3.1	6.9	1.2	0.2	0.2	2.3
2007-2008	31.6	21.0	35.2	34.3	16.3	10.7	19.1	17.0	4.6	2.0	5.1	5.5	1.3	1.2	0.6	1.9
2009-2010	30.7	24.9	32.0	32.6	15.2	10.6	16.0	16.9	5.0	1.5	4.6	7.0	1.5	0.3	1.8	1.9
2011-2012	32.4	22.9	36.3	34.2	17.4	8.0	19.7	20.4	6.0	1.6	6.9	7.7	2.3	0.4	1.8	3.7
P trend test[b]	.01	.85	.09	.20	.01	.37	.01	.04	.04	.50	.02	.15	.003	.04	.01	.11
Males																
1999-2000	29.9	22.3	33.3	30.8	14.6	10.0	16.3	15.3	3.8	1.4	3.2	5.4	1.0	0.4	0.8	1.4
2001-2002	30.1	23.6	31.9	31.1	16.4	10.9	17.2	17.7	5.8	2.8	7.3	5.9	1.6	0.9	2.1	1.5
2003-2004	34.2	27.7	35.4	36.2	18.2	14.8	18.9	19.1	5.2	3.7	5.1	6.0	1.6	1.3	1.4	1.9
2005-2006	30.3	24.5	31.1	32.3	16.4	10.3	17.6	18.3	5.1	1.6	4.3	7.1	1.2	0.4	0.7	2.0
2007-2008	31.5	21.7	35.6	33.6	18.3	10.4	21.4	20.0	5.4	1.4	6.0	6.8	1.6	0.4	1.3	2.4
2009-2010	33.2	28.9	34.6	34.2	18.7	14.8	20.1	19.7	6.3	3.5	5.5	8.4	1.7	0.3	1.0	2.9
2011-2012	32.0	23.6	33.0	35.3	17.2	8.8	17.2	21.4	5.7	1.8	6.8	6.8	2.0	0.6	2.2	2.4
P trend test[b]	.32	.59	.77	.19	.06	.93	.30	.03	.16	.96	.23	.21	.09	.43	.51	.02

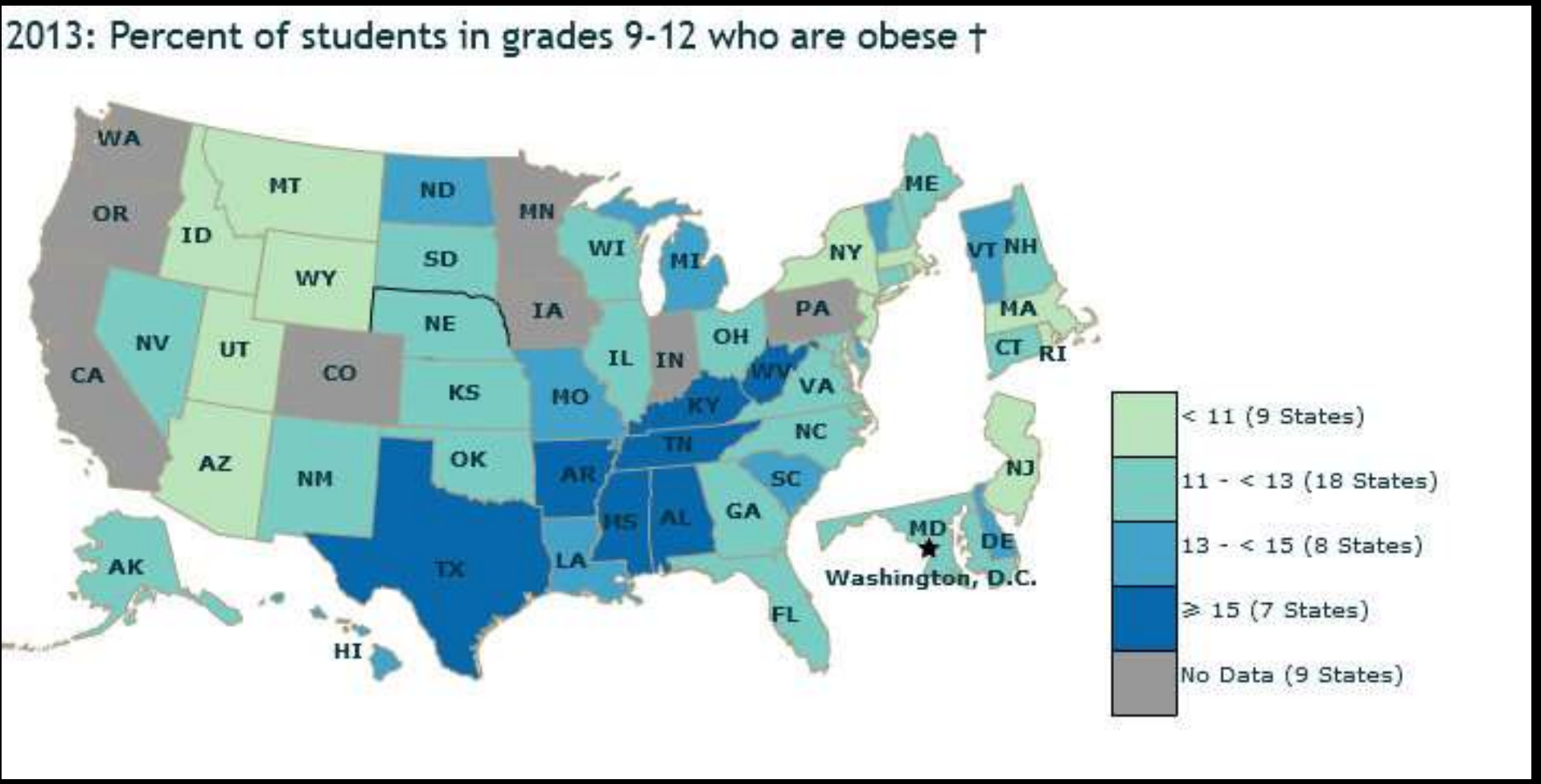
Trends in obesity prevalence among youth aged 2–19 years: United States, 1999–2000 through 2013–2014



[1] Significant increasing linear trend from 1999–2000 through 2013–2014.
[2] Test for linear trend for 2003–2004 through 2013–2014 not significant ($p > 0.05$).
SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

2012: Percent of WIC children aged 2 to 4 years who have obesity †




2013: Percent of students in grades 9-12 who are obese †
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MI
IN
OH
KY
TN
MS
AL
GA
FL
SC
NC
VA
WV
PA
NY
ME
VT
NH
MA
CT
RI
NJ
MD
DE
Washington, D.C.
AK
HI
< 11 (9 States)
11 - < 13 (18 States)
13 - < 15 (8 States)
≥ 15 (7 States)
No Data (9 States)

Prevalence¶ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2015

State	Prevalence	95% Confidence Interval
Alabama	35.6	(34.1, 37.2)
Alaska	29.8	(27.5, 32.3)
Arizona	28.4	(26.9, 30.0)
Arkansas	34.5	(32.2, 36.9)
California	24.2	(23.2, 25.2)
Colorado	20.2	(19.1, 21.3)
Connecticut	25.3	(24.1, 26.4)
Delaware	29.7	(27.6, 31.8)
District of Columbia	22.1	(19.7, 24.8)
Florida	26.8	(25.5, 28.1)
Georgia	30.7	(28.8, 32.6)
Guam	31.6	(28.2, 35.1)
Hawaii	22.7	(21.3, 24.1)
Idaho	28.6	(26.9, 30.4)
Illinois	30.8	(29.2, 32.4)
Indiana	31.3	(29.5, 33.1)
Iowa	32.1	(30.5, 33.8)
Kansas	34.2	(33.4, 35.0)
Kentucky	34.6	(32.9, 36.3)
Louisiana	36.2	(34.3, 38.1)
Maine	30.0	(28.6, 31.4)
Maryland	28.9	(27.2, 30.7)
Massachusetts	24.3	(23.0, 25.6)
Michigan	31.2	(29.9, 32.4)
Minnesota	26.1	(25.3, 27.0)
Mississippi	35.6	(33.8, 37.5)

State	Prevalence	95% Confidence Interval
Missouri	32.4	(30.8, 34.0)
Montana	23.6	(22.1, 25.2)
Nebraska	31.4	(30.3, 32.5)
Nevada	26.7	(24.1, 29.5)
New Hampshire	26.3	(24.8, 27.9)
New Jersey	25.6	(24.3, 26.9)
New Mexico	28.8	(27.1, 30.6)
New York	25.0	(24.0, 26.1)
North Carolina	30.1	(28.7, 31.5)
North Dakota	31.0	(29.3, 32.8)
Ohio	29.8	(28.4, 31.2)
Oklahoma	33.9	(32.2, 35.6)
Oregon	30.1	(28.4, 31.8)
Pennsylvania	30.0	(28.4, 31.6)
Puerto Rico	29.5	(28.0, 31.1)
Rhode Island	26.0	(24.3, 27.7)
South Carolina	31.7	(30.5, 33.0)
South Dakota	30.4	(28.5, 32.3)
Tennessee	33.8	(31.9, 35.7)
Texas	32.4	(30.9, 33.9)
Utah	24.5	(23.5, 25.5)
Vermont	25.1	(23.8, 26.6)
Virginia	29.2	(27.9, 30.6)
Washington	26.4	(25.5, 27.4)
West Virginia	35.6	(34.1, 37.1)
Wisconsin	30.7	(29.0, 32.4)
Wyoming	29.0	(27.0, 31.1)

¶ Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.
Source: Behavioral Risk Factor Surveillance System, CDC.

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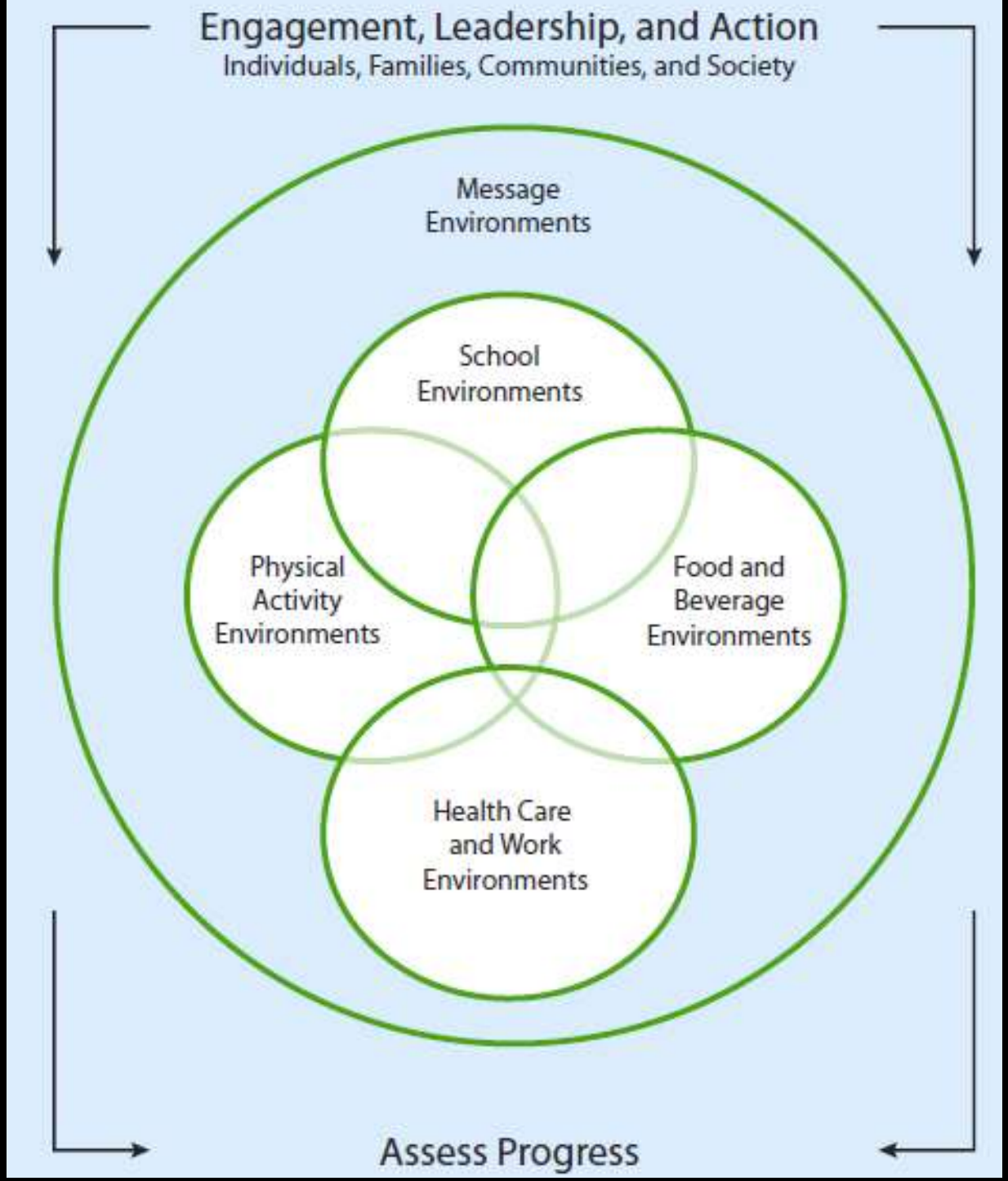


Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation, IOM 2012

ORIGINAL ARTICLE

A Silent Response to the Obesity Epidemic

Decline in US Physician Weight Counseling

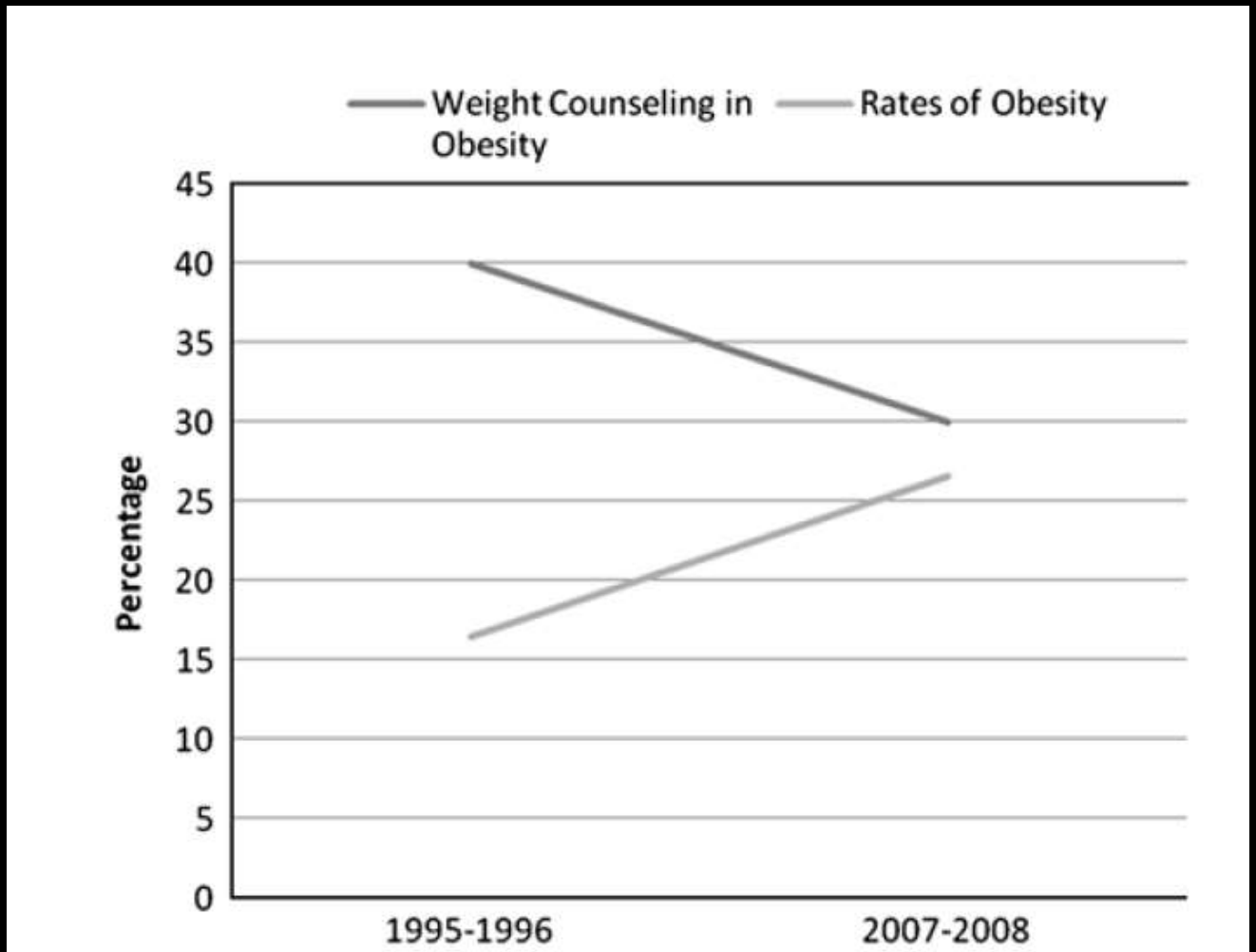
Jennifer L. Kraschnewski, MD, MPH, Christopher N. Sciamanna, MD, MPH,* Heather L. Stuckey, DEd,* Cynthia H. Chuang, MD, MSc,* Erik B. Lehman, MS,* Kevin O. Hwang, MD, MPH,† Lisa L. Sherwood, MD,* and Harriet B. Nembhard, PhD, MSE‡*

Kraschnewski JL, Sciamanna CN, Stuckey HL, Chuang CH, Lehman EB, Hwang KO, et al. A silent response to the obesity epidemic: decline in US physician weight counseling. Med Care. 2013;51(2):186-92.

TABLE 4. Lifestyle Counseling Among Those With and Without Obesity and Weight-related Comorbidities, 1995–1996 verses 2007–2008*

	% Counseling†			
Variables/Group	1995–1996	2007–2008	OR (95% CI)‡	*P*
Weight counseling				
Hypertension	13.6	8.5	0.53 (0.41, 0.68)	<0.001
Diabetes	17.6	10.0	0.41 (0.31, 0.54)	<0.001
Obesity	39.9	29.9	0.59 (0.45, 0.77)	<0.001
All adults	7.8	6.2	0.64 (0.53, 0.79)	<0.001
Diet counseling				
Hypertension	30.1	22.0	0.53 (0.43, 0.66)	<0.001
Diabetes	42.3	26.8	0.38 (0.30, 0.48)	<0.001
Obesity	47.6	35.7	0.49 (0.37, 0.64)	<0.001
All adults	19.0	16.3	0.65 (0.54, 0.76)	<0.001
Exercise counseling				
Hypertension	21.2	14.4	0.54 (0.43, 0.69)	<0.001
Diabetes	24.6	15.7	0.46 (0.34, 0.61)	<0.001
Obesity	35.4	25.8	0.60 (0.44, 0.83)	<0.001
All adults	14.2	11.3	0.63 (0.52, 0.76)	<0.001
Lifestyle (weight, diet, or physical activity) counseling				
Hypertension	35.5	26.7	0.55 (0.45, 0.68)	<0.001
Diabetes	45.3	31.4	0.43 (0.34, 0.54)	<0.001
Obesity	56.9	49.8	0.64 (0.50, 0.83)	<0.001
All adults	23.8	20.9	0.68 (0.58, 0.79)	<0.001

Kraschnewski JL, Sciamanna CN, Stuckey HL, Chuang CH, Lehman EB, Hwang KO, et al. A silent response to the obesity epidemic: decline in US physician weight counseling. Med Care. 2013;51(2):186-92.



Kraschnewski JL, Sciamanna CN, Stuckey HL, Chuang CH, Lehman EB, Hwang KO, et al. A silent response to the obesity epidemic: decline in US physician weight counseling. Med Care. 2013;51(2):186-92.

SUPPLEMENT ARTICLE

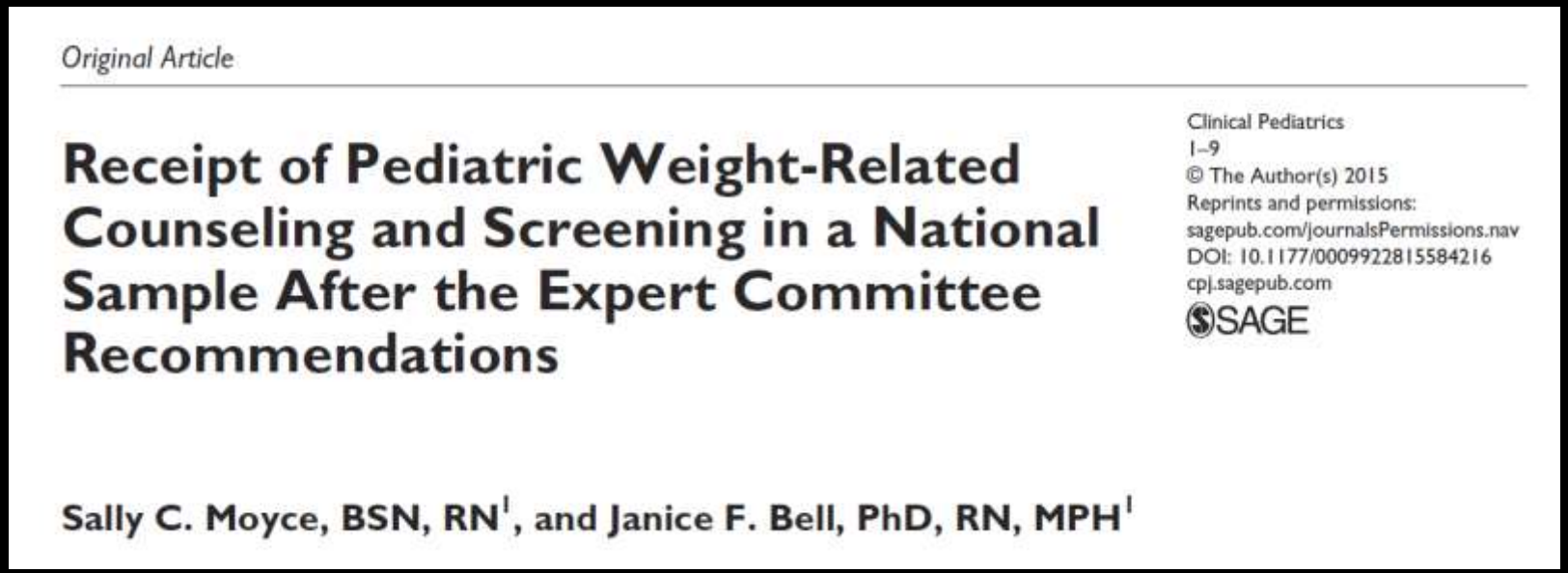
Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report

Sarah E. Barlow, MD, MPH and the Expert Committee

Division of Pediatric Gastroenterology, Nutrition, and Hepatology, Department of Pediatrics, Baylor College of Medicine, Texas Children's Hospital, Houston, Texas

The author has indicated she has no financial relationships relevant to this article to disclose.

Barlow SE et al. Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report. *Pediatrics. December 1, 2007;120(Supplement 4):S164-S192.*



Original Article

Receipt of Pediatric Weight-Related Counseling and Screening in a National Sample After the Expert Committee Recommendations

Clinical Pediatrics
1–9

DOI: 10.1177/0009922815584216
cpj.sagepub.com
SAGE

Sally C. Moyce, BSN, RN[1], and Janice F. Bell, PhD, RN, MPH[1]

Moyce SC, Bell JF. Receipt of Pediatric Weight-Related Counseling and Screening in a National Sample After the Expert Committee Recommendations. *Clin Pediatr (Phila). Apr 29 2015.*

Study Overview

- 2008-2011 Medical Expenditures Panel Survey
- Parent Self Report
- n = 9835

Parental Report of….

1. BMI screening (ie, the child had both height and weight measured)

2. Child received counseling from a provider related to healthy eating (ie, obesity prevention messages related to diet)

3. Child received counseling from a provider related to exercise (ie, obesity prevention messages related to exercise)

Table 1. Demographics of Study Sample by Receipt of Counseling and Screening.

	Total (n = 9835), % of Sample	Exercise Guidance (n = 9757), % of Sample	Diet Guidance (n = 9757), % of Sample	BMI Screening (n = 9595), % of Sample
BMI classification[a]				
Normal weight	62	39	54	99
Overweight	22	45	60	99
Obese	16	52	67	99

Moyce SC, Bell JF. Receipt of Pediatric Weight-Related Counseling and Screening in a National Sample After the Expert Committee Recommendations. *Clin Pediatr (Phila). Apr 29 2015.*

Affordable Care Act and Childhood Obesity

- Enhanced federal Medicaid match for states that cover USPSTF grade A and B recommendations
- Public awareness campaigns to educate Medicaid enrollees about services
- Childhood Obesity Demonstration Project thru Children's Health Insurance Program Reauthorization Act (CHIPRA): 4 Funded in 2011
- For privately insured adults, Preventive and Wellness Services and Chronic Disease Management part of Essential Health Benefits

HEDIS measure: Childhood Weight Assessment and Counseling

Nutrition and physical activity for children and adolescents

Description	CPT	ICD-9-CM Diagnosis	HCPCS
BMI percentile		V85.5	
Counseling for nutrition	97802-97804	V65.3	G0270-G0271, S9449, S9452, S9470
Counseling for physical activity		V65.41	S9451

SUPPLEMENT ARTICLE

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ADULT GUIDELINES

U.S. Preventive Services TASK FORCE

SCREENING FOR AND MANAGEMENT OF OBESITY IN ADULTS
CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATION

Population	Adults aged 18 years or older
Recommendation	**Screen for obesity. Patients with a body mass index (BMI) of 30 kg/m^2 or higher should be offered or referred to intensive, multicomponent behavioral interventions.** **Grade: B**

Screening Tests	Body mass index is calculated from the measured weight and height of an individual. Recent evidence suggests that waist circumference may be an acceptable alternative to BMI measurement in some patient subpopulations.
Timing of Screening	No evidence was found about appropriate intervals for screening.
Interventions	Intensive, multicomponent behavioral interventions for obese adults include the following components: • Behavioral management activities, such as setting weight-loss goals • Improving diet or nutrition and increasing physical activity • Addressing barriers to change • Self-monitoring • Strategizing how to maintain lifestyle changes
Balance of Harms and Benefits	Adequate evidence indicates that intensive, multicomponent behavioral interventions for obese adults can lead to weight loss, as well as improved glucose tolerance and other physiologic risk factors for cardiovascular disease. Inadequate evidence was found about the effectiveness of these interventions on long-term health outcomes (for example, mortality, cardiovascular disease, and hospitalizations). Adequate evidence indicates that the harms of screening and behavioral interventions for obesity are small. Possible harms of behavioral weight-loss interventions include decreased bone mineral density and increased fracture risk, serious injuries resulting from increased physical activity, and increased risk for eating disorders.

2010 USPSTF Pediatric Guidelines

SCREENING FOR OBESITY IN CHILDREN AND ADOLESCENTS: CLINICAL SUMMARY OF USPSTF RECOMMENDATION

Population	**Children and adolescents 6 to 18 y of age**
Recommendation	**Screen children aged 6 y and older for obesity.** **Offer or refer for intensive counseling and behavioral interventions.** **Grade: B**

Screening tests	BMI is calculated from the weight in kilograms divided by the square of the height in meters. Height and weight, from which BMI is calculated, are routinely measured during health maintenance visits. BMI percentile can be plotted on a chart or obtained from online calculators. Overweight = age- and gender-specific BMI at ≥85th to 94th percentile Obesity = age- and gender-specific BMI at ≥95th percentile
Timing of screening	No evidence was found on appropriate screening intervals.
Interventions	Refer patients to comprehensive moderate- to high-intensity programs that include dietary, physical activity, and behavioral counseling components.
Balance of harms and benefits	Moderate- to high-intensity programs were found to yield modest weight changes. Limited evidence suggests that these improvements can be sustained over the year after treatment. Harms of screening were judged to be minimal.
Relevant recommendations from the USPSTF	Recommendations on other pediatric and behavioral counseling topics can be found at www.preventiveservices.ahrq.gov.

2017 Updated USPSTF Pediatric Guidelines

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

Screening for Obesity in Children and Adolescents US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

JAMA. 2017;317(23):2417-2426.

OBJECTIVE To update the 2010 US Preventive Services Task Force (USPSTF) recommendation on screening for obesity in children 6 years and older.

CONCLUSIONS AND RECOMMENDATION The USPSTF recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status. (B recommendation)

AHA Scientific Statement

Interventions to Promote Physical Activity and Dietary Lifestyle Changes for Cardiovascular Risk Factor Reduction in Adults

A Scientific Statement From the American Heart Association

Endorsed by the Preventive Cardiovascular Nurses Association and the Society of Behavioral Medicine

Nancy T. Artinian, PhD, RN, FAHA, Chair; Gerald F. Fletcher, MD, FAHA, Co-Chair; Dariush Mozaffarian, MD, DrPH, FAHA; Penny Kris-Etherton, PhD, RD, FAHA; Linda Van Horn, PhD, RD, FAHA; Alice H. Lichtenstein, DSc, FAHA; Shiriki Kumanyika, PhD, MPH, FAHA; William E. Kraus, MD, FAHA; Jerome L. Fleg, MD, FAHA; Nancy S. Redeker, PhD, RN, FAHA; Janet C. Meininger, PhD, RN; JoAnne Banks, RN, PhD; Eileen M. Stuart-Shor, PhD, ANP, FAHA; Barbara J. Fletcher, RN, MN, FAHA; Todd D. Miller, MD, FAHA; Suzanne Hughes, MSN, RN, FAHA; Lynne T. Braun, PhD, CNP, FAHA; Laurie A. Kopin, MS, RN, ANP, FPCNA; Kathy Berra, MSN, ANP, FAHA; Laura L. Hayman, PhD, RN, FAHA; Linda J. Ewing, PhD, RN; Philip A. Ades, MD; J. Larry Durstine, PhD; Nancy Houston-Miller, BSN, FAHA; Lora E. Burke, PhD, MPH, FAHA, Steering Committee Co-Chair; on behalf of the American Heart Association Prevention Committee of the Council on Cardiovascular Nursing

Table 4. Recommendations for Counseling Individuals to Promote Dietary and PA Changes to Reduce Cardiovascular Disease Risk

Cognitive-behavioral strategies for promoting behavior change

Class I

- Design interventions to target dietary and PA behaviors with specific, proximal goals [goal setting]. (Level of evidence: A)
- Provide feedback on progress toward goals. (Level of evidence: A)
- Provide strategies for self-monitoring. (Level of evidence: A)
- Establish a plan for frequency and duration of follow-up contacts (eg, in-person, oral, written, electronic) in accordance with individual needs to assess and reinforce progress toward goal achievement. (Level of evidence: A)
- Utilize motivational interviewing strategies, particularly when an individual is resistant or ambivalent about dietary and PA behavior change. (Level of evidence: A)

Obesity

Executive Summary: Guidelines (2013) for the Management of Overweight and Obesity in Adults

A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and The Obesity Society

Published by The Obesity Society and American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Based on a systematic review from the The Obesity Expert Panel, 2013

Box 8: Assess Readiness to Make Lifestyle Changes to Achieve Weight Loss and Identify Barriers to Success

The Expert Panel advises (expert opinion) that the clinician and patient agree on whether weight loss is appropriate. The clinician, together with the patient, should assess whether the patient is prepared and ready to undertake the measures necessary to succeed at weight loss before beginning comprehensive counseling efforts. The clinician can ask, "How prepared are you to make changes in your diet, to be more physically active, and to use behavior change strategies such as recording your weight and food intake?" These are the components of a comprehensive lifestyle intervention.

The decision to undertake weight loss efforts must be made in the context of competing priorities (e.g., smoking cessation may supersede a weight loss effort; life events may make the effort at weight reduction futile until a future time). If the patient is not prepared to undertake these changes, attempts to counsel the patient on how to make lifestyle changes are likely to be counterproductive.

PEDIATRICS®
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Recommendations for Prevention of Childhood Obesity
Matthew M. Davis, Bonnie Gance-Cleveland, Sandra Hassink, Rachel Johnson, Gilles Paradis and Kenneth Resnicow
Pediatrics 2007;120;S229-S253

Clinician Counseling Skills

In this section, we address ways in which clinicians can intervene in the dietary and activity behaviors discussed above, providing a concrete set of suggested strategies and approaches for obesity prevention in practice settings. Counseling in medical practice can be reduced to 4 essential skills, that is, (1) asking, (2) informing, (3) advising, and (4) listening. A framework for understanding how these skills are used in client-centered counseling was proposed by Rollnick et al.[224] The framework delineates how these 4 skills manifest as 3 styles of communication, namely, following, guiding, and directing. These styles are differentiated by the skills used and the phase of the counseling encounter. The early phase is predominantly characterized by following. In the following phase, by using reflective listening and open-ended questions, the counselor gathers information

Provide/Elicit
Provide positive feedback for behavior(s) in optimal range. Elicit response. Reflect and probe. Provide behavior(s) not in optimal range. Elicit response. Reflect and probe.

Step 2: Set Agenda
Query which, if any, of the target behaviors not in the optimal range the parent/child/adolescent may be interested in changing or may be easiest to change. Sample language is as follows. Which, if any, of these might you and your child be able to change? Which of these might be a good place to start? Which of these do you think might be the easiest one to start with? Agree on possible target behaviors.

Step 3: Assess Motivation and Confidence

Willingness/Importance
Assess willingness and importance, as follows. On a scale of 0 to 10, with 10 being very important, how important is it for you/child/family to change (insert target behavior) or to lose weight?

Confidence
Assess confidence, as follows. On a scale of 0 to 10, with 10 being very confident, assuming you decided to change (insert target behavior) or weight, how confident are you that you/she/he could succeed?

Probes
Explore importance and confidence ratings with the following probes. Why did you not choose a lower number (benefits)? Why did you not choose a higher number (barriers)? What would it take to move you to a higher number (solutions)? Use reflective statements to explore the advantages and disadvantages of changing.

Step 4: Summarize and Probe Possible Changes
Summarize the advantages and disadvantages of change. Query possible next steps. Sample language is as follows. So where does that leave you? From what you mentioned, it sounds like (insert target step) may be a good first step. How are you feeling about making a change? If change is indicated, probe the plan of attack. Sample language is as follows. What might be a good first step for you and your child? What might you do in the next week or even day to help move things along? What ideas do you have for making this happen? From our discussion, it sounds like (insert possible suggestions raised in session) might be a good place to start. If the patient has trouble generating ideas, consider offering the following: If it's okay with you, I'd like to suggest a few things that have worked for some of my patients. Summarize the change plan. Provide positive feedback.

Perceived Barriers in the Treatment of Overweight Children and Adolescents

	Percentage Responding "Most of the Time" and "Often"		
Barrier	RDs (n= 441)	PNPs (n = 293)	Pediatricians (n = 201)
Lack of patient motivation	**61.9**	**78.2**	**85.7**
Lack of parent involvement	**71.8**	**82.5**	**81.2**
Lack of clinician time	31.2	45.9	58.0
Lack of reimbursement	68.1	46.8	45.8
Lack of clinician knowledge	23.8	32.2	44.0
Lack of treatment skills	27.3	32.2	45.0
Lack of support services	55.5	57.0	60.0
Treatment futility	37.4	52.6	53.0
Eating disorder concerns	17.2	12.9	10.0

Story MT, Neumark-Stzainer DR, Sherwood NE, Holt K, Sofka D, Trowbridge FL, et al. Management of child and adolescent obesity: attitudes, barriers, skills, and training needs among health care professionals. Pediatrics. 2002;110(1 Pt 2):210-4.

Attitudes toward pediatric obesity counseling

	Family Practice (n=74)	Peds (n=213)
Personal ability to counsel		
Poor	11%	6%
Fair	30%	17%
Average	44%	47%
Good15%	**27%**	
Excellent	**0%**	**3%**
Efficacy of obesity counseling		
Poor	11%	23%
Fair	48%	33%
Average	36%	35%
Good	**5%**	**9%**
Excellent	**0%**	**0.5%**

Kolagotla L, Adams W. Ambulatory management of childhood obesity. Obesity Research 2004;12(2):275-83.

MI as Prelude vs. MI as Treatment

MI (Prelude)
WHY SHOULD I CHANGE

BEHAVIOR THERAPY
WHY I EAT
WHAT I EAT
HOW I EAT

MI-based BT

- **Autonomy Supportive**
- **Choice**
- **Collaborative**
- **Guide vs Direct**
- **Tentative Language**

Two Elements of Behavior Change Counseling

WHY to Change → **HOW to Change**

ENERGY
VIGILANCE
MI

Goal
Plan

CBT/Behavioral Economics/NUDGE

Starting with a strong WHY leads to better outcomes

- **More likely to TRY**
- **More likely to PERSIST**
- **More likely to SUCCEED**

Essence of Motivational Interviewing

Comfort the afflicted

and

Afflict the comfortable

Essence of Motivational Interviewing

Roll with Resistance

Then

Find Meaning for Change

- Acknowledge Dread: Drain the Swamp
- Link with Role, Goals, and Values
- Disrupt

Energizing Change

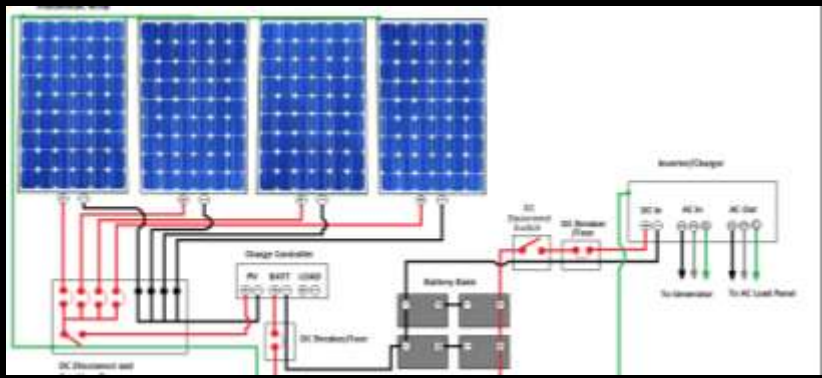
Fear
Facts
Feedback

Roles
Values
Meaning

Energy Independence

Successful long-term behavior change is the formation of habit with low need for exertion, effort, or impulse control.

Energy is needed to start the change process and get back on track when derailed. However, the goal is energy independence.



MI vs. Usual Care

- Address Feeling Before Fixing
- Reflect vs. ask
  - ✓ 2-3 Reflections per Question
- Roll with resistance vs. counterpunch
- Elicit change talk vs. inform/advise
- Affirm effort and commitent

- > 50% patient talk time

- Client: We eat at Wendy's a few times a week. It's cheap, fast, my kids like it, and it's *better t*han those other places. There's a lot worse we could be eating. Sure there are better foods than that but I don't have time to cook…

- AFFIRM

Married sedentary female

"I really need to find someone to exercise with. I can't do it alone. I just need someone to remind me or do it with me……but there is no one…."

Reflect on Omission

AJPH PUBLIC HEALTH OF CONSEQUENCE

Efficient Allocation of Public Health and Behavior Change Resources: The "Difficulty by Motivation" Matrix

January 2017, Vol 107, No. 1 AJPH

Ken Resnicow, PhD
Pedro J. Teixeira, PhD
Geoffrey C. Williams, MD, PhD

Brand Switch

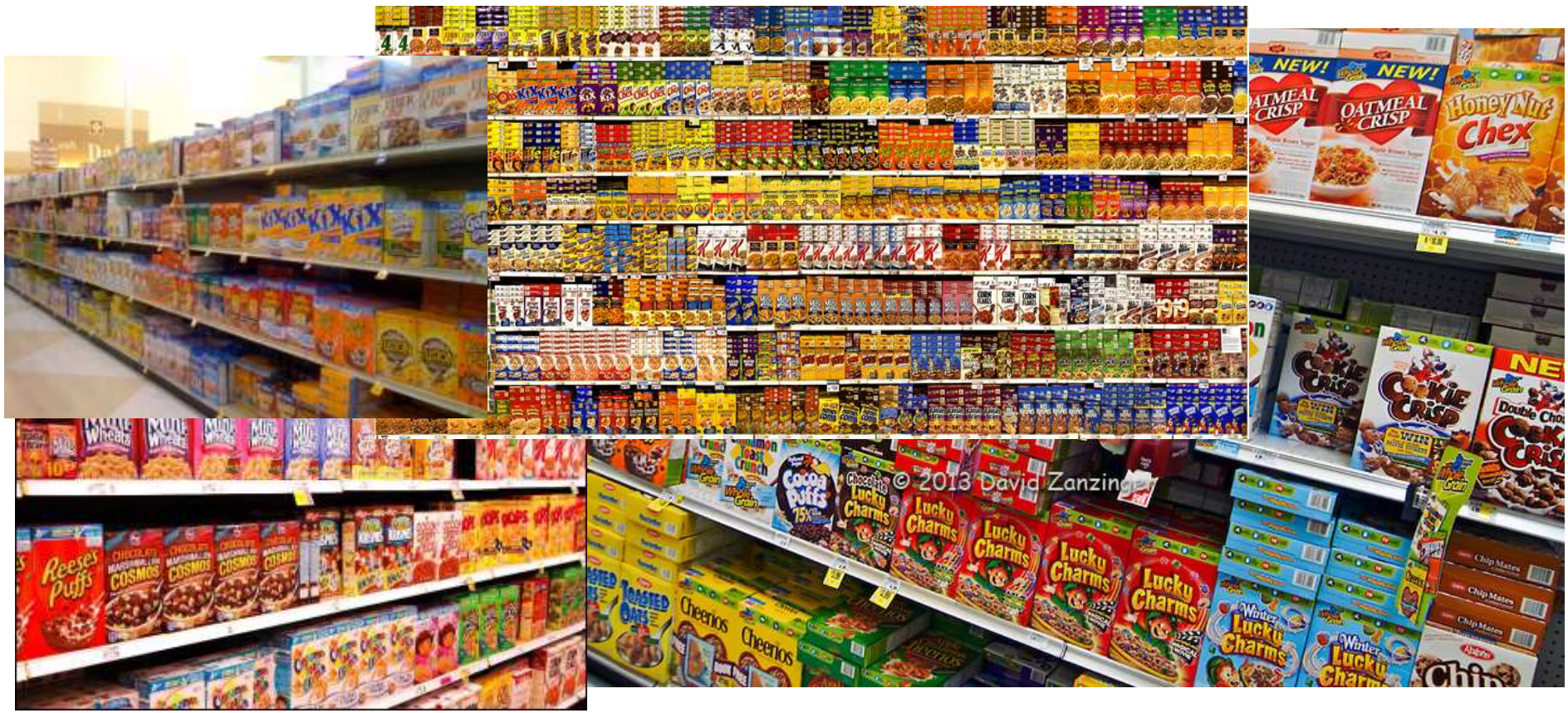
Vaccination
Seat Belt
Most Screening Tests

Smoking Cessation
Addiction
Obesity
Managing Chronic Disease

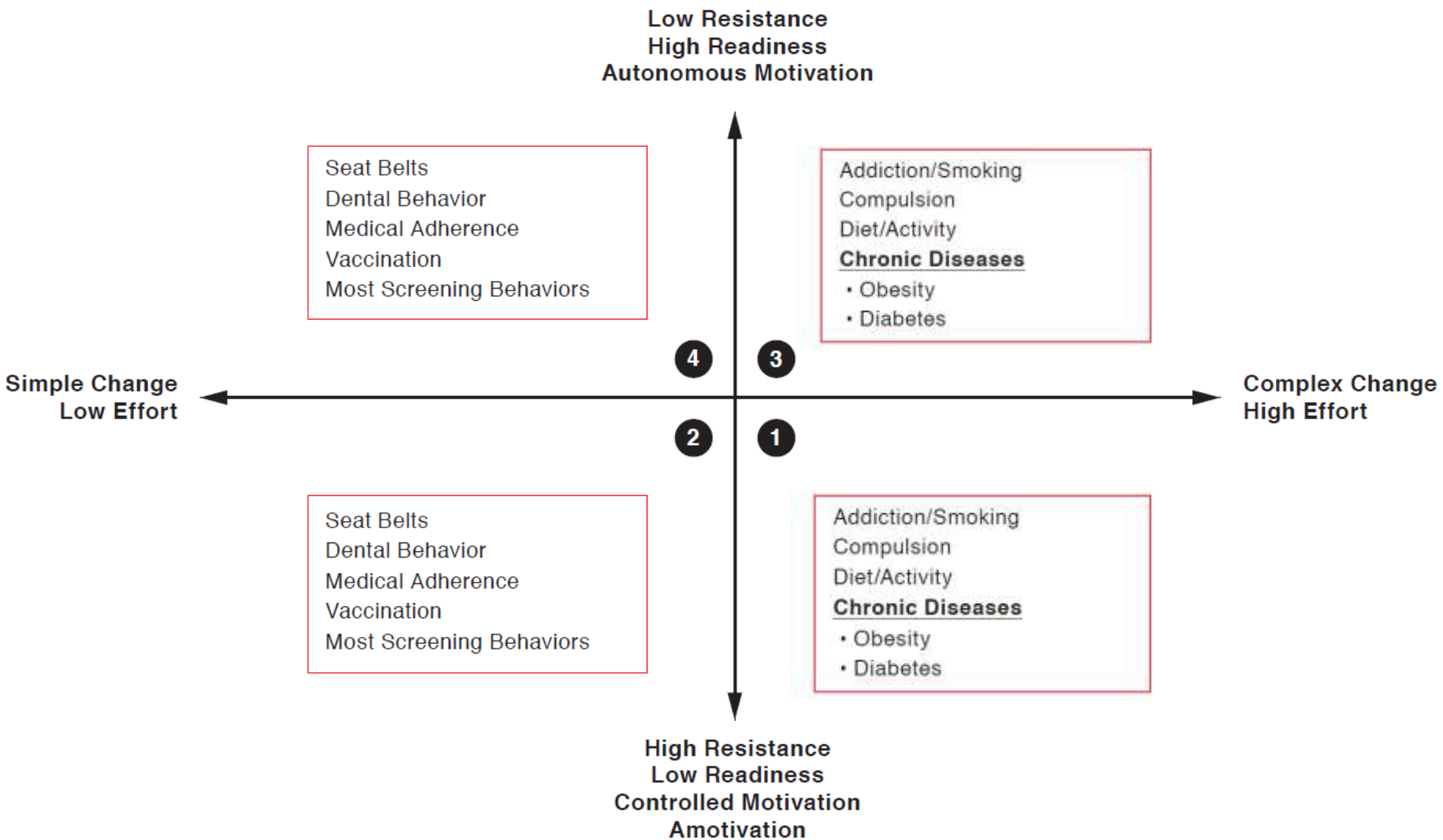
Brand Switch

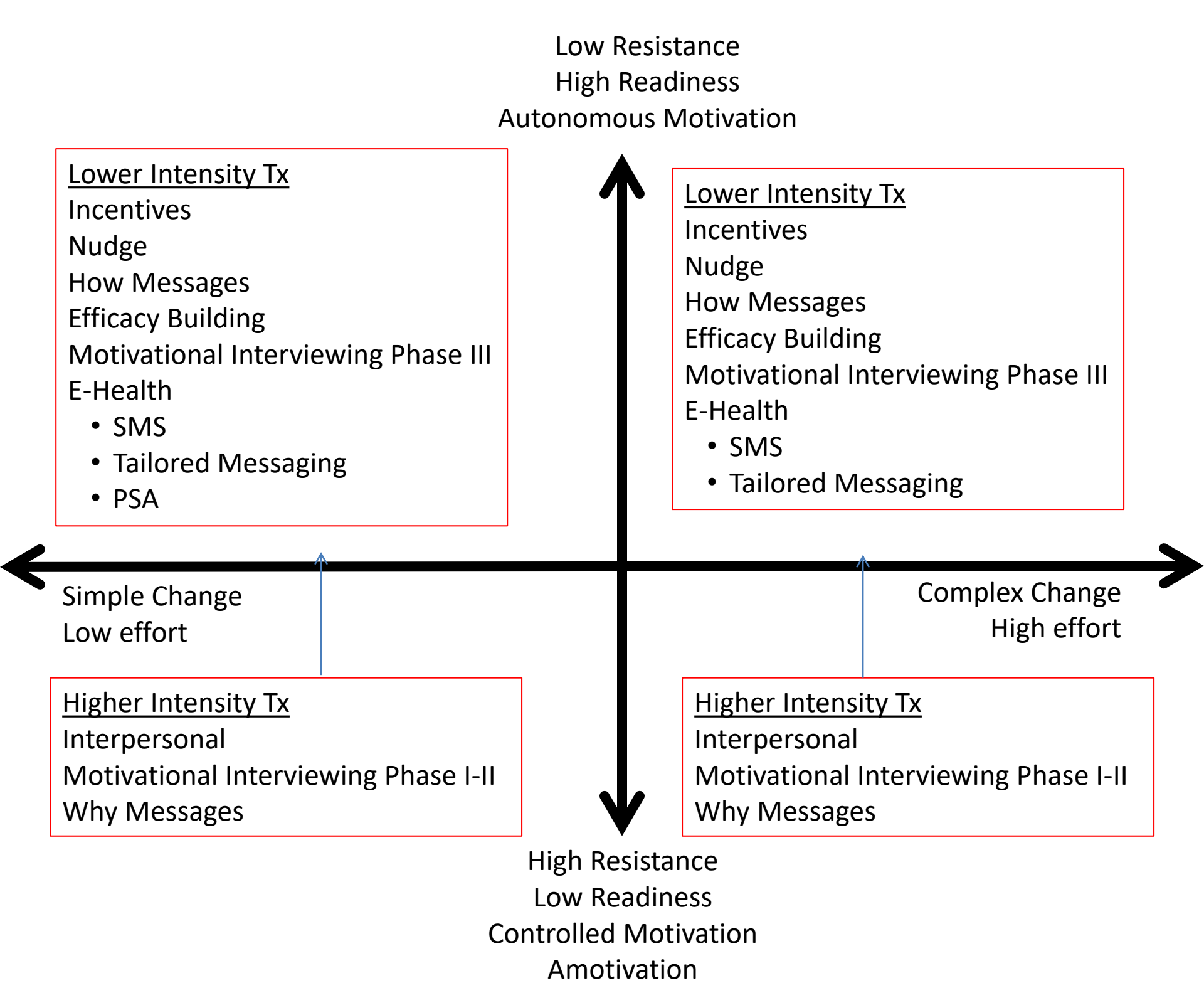
Simple Change
Low Effort

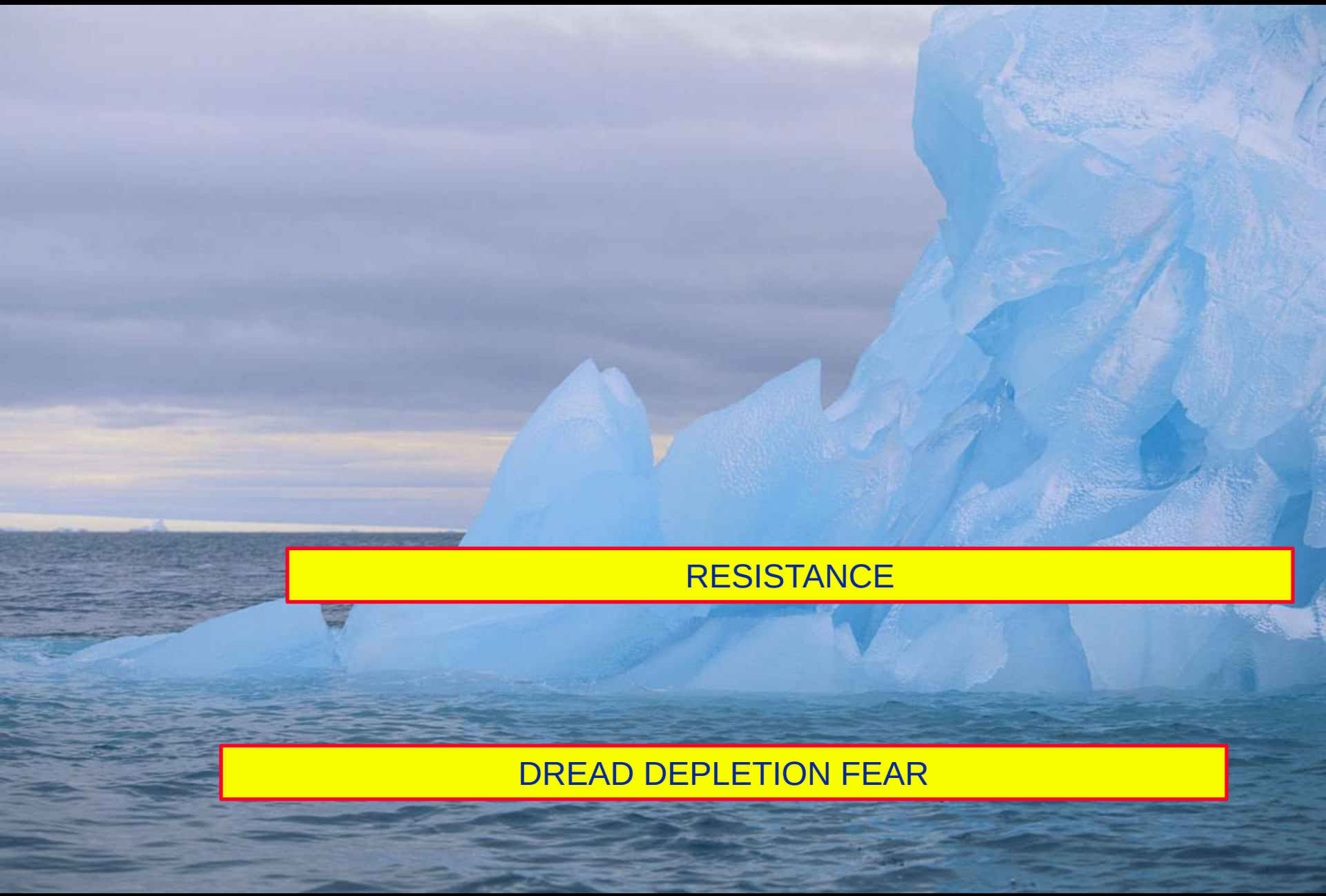
Complex Change
High Effort



Behaviors


Low Resistance
High Readiness
Autonomous Motivation
Seat Belts
Dental Behavior
Medical Adherence
Vaccination
Most Screening Behaviors
Addiction/Smoking
Compulsion
Diet/Activity
Chronic Diseases
• Obesity
• Diabetes
4
3
Simple Change
Low Effort
Complex Change
High Effort
2
1
Seat Belts
Dental Behavior
Medical Adherence
Vaccination
Most Screening Behaviors
Addiction/Smoking
Compulsion
Diet/Activity
Chronic Diseases
• Obesity
• Diabetes
High Resistance
Low Readiness
Controlled Motivation
Amotivation


Low Resistance
High Readiness
Autonomous Motivation
Lower Intensity Tx
Incentives
Nudge
How Messages
Efficacy Building
Motivational Interviewing Phase III
E-Health
• SMS
• Tailored Messaging
• PSA
Lower Intensity Tx
Incentives
Nudge
How Messages
Efficacy Building
Motivational Interviewing Phase III
E-Health
• SMS
• Tailored Messaging
Simple Change
Low effort
Complex Change
High effort
Higher Intensity Tx
Interpersonal
Motivational Interviewing Phase I-II
Why Messages
Higher Intensity Tx
Interpersonal
Motivational Interviewing Phase I-II
Why Messages
High Resistance
Low Readiness
Controlled Motivation
Amotivation


RESISTANCE
DREAD DEPLETION FEAR

MI Evidence Base

> 3500 papers

400 RCTs; Multiple Reviews & Meta-Analyses

- Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *Journal of Consulting & Clinical Psychology., 71(5), 843-861.*
- Dunn, C., Deroo, L., & Rivara, F. (2001). The use of brief interventions adapted from motivational interviewing across behavioral domains: a systematic review. *Addiction, 96(12), 1725-1742.*
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational Interviewing. *Annual Review of Clinical Psychology, 1(1), 91-111.*
- Knight, K. M., McGowan, L., Dickens, C., & Bundy, C. (2006). A systematic review of motivational interviewing in physical health care settings. *Br J Health Psychol, 11(Pt 2), 319-332.*
- Madson, M. B., Loignon, A. C., & Lane, C. (2009). Training in motivational interviewing: a systematic review. *J Subst Abuse Treat, 36(1), 101-109.*
- Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64(6), 527-537.*
- Noonan, W., & Moyers, T. (1997). Motivational interviewing: A review. *Journal of Substance Misuse, 2, 8-16.*
- Resnicow, K., Davis, R., & Rollnick, S. (2006). Motivational interviewing for pediatric obesity: conceptual issues and evidence review. *Journal of the American Dietetic Association 106(12), 2024-2033.*
- *Eating. Elk Grove Village: American Academy of Pediatrics.*
- Suarez, M., & Mullins, S. (2008). Motivational interviewing and pediatric health behavior interventions. *Journal of Developmental & Behavioral Pediatrics, 29(5), 417-428.*
- VanWormer, J. J., & Boucher, J. L. (2004). Motivational interviewing and diet modification: a review of the evidence. *Diabetes Educator, 30(3), 404-406.*
- Vasilaki, E. I., Hosier, S. G., & Cox, W. M. (2006). The efficacy of motivational interviewing as a brief intervention for excessive drinking: a meta-analytic review. *Alcohol Alcohol, 41(3), 328-335.*

Effect sizes

Small	.20 - .50
Medium	.50 - .80
Large	> .80

Cohen, J., *Statistical power analysis for the behavioral sciences*. 2nd ed1988, Hillsdale, New Jersey: Erlbaum.

The Effectiveness and Applicability of Motivational Interviewing: A Practice-Friendly Review of Four Meta-Analyses

▼

Brad Lundahl
University of Utah

▼

Brian L. Burke
Fort Lewis College

Overall (Omnibus) Results of Motivational Interviewing Across Four Meta-Analyses

	Weak comparison groups		Strong comparison groups	
	d (SD)	Difference in success rate (%)	*d* (SD)	Difference in success rate (%)
Burke et al. (2003)	0.35 (0.22)	17	0.04 (0.07)	2
Hettema et al. (2005)	0.27 (0.17)	13	0.32 (0.35)	15
Vasilaki et al. (2006)	0.40 (0.46)	19	0.27 (0.26)	13
Lundahl et al. (2009)	0.28 (0.16)	14	0.09 (0.16)	5

JOURNAL OF CLINICAL PSYCHOLOGY: IN SESSION, Vol. 65(11), 1232–1245 (2009)

Recent Meta-Analysis

Outcome	Effect size	95% confidence interval	Z	I^2	No of studies
Weight Change	0.29	[-0.20, 0.38]	6.34**	95%	11
Waist Circumference	1.53	[0.06, 3.11]	1.88	0%	5
BMI Change	0.33	[-0.17, 0.50]	3.91**	0%	10
Physical Activity	0.11	[0.04, 0.18]	3.08**	86%	16
Fruit and Vegetable intake	0.24	[0.12, 0.25]	4.10**	70%	17
HbA1c Change	0.38	[-0.04, 0.72]	2.16*	87%	7
Blood Pressure	1.01	[-0.78, -1.24]	8.52**	100%	4

Statistically Significant at: *p<0.01, **p<0.001

McMaster F, Resnicow K, et al **Motivational Interviewing for Chronic Disease Prevention: A systematic review and meta-analysis .** (under review)

PROS
Pediatric Research In Office Settings

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Can Brief Motivational Interviewing in Practice Reduce Child Body Mass Index?

Results of a 2-year Randomized Controlled Trial

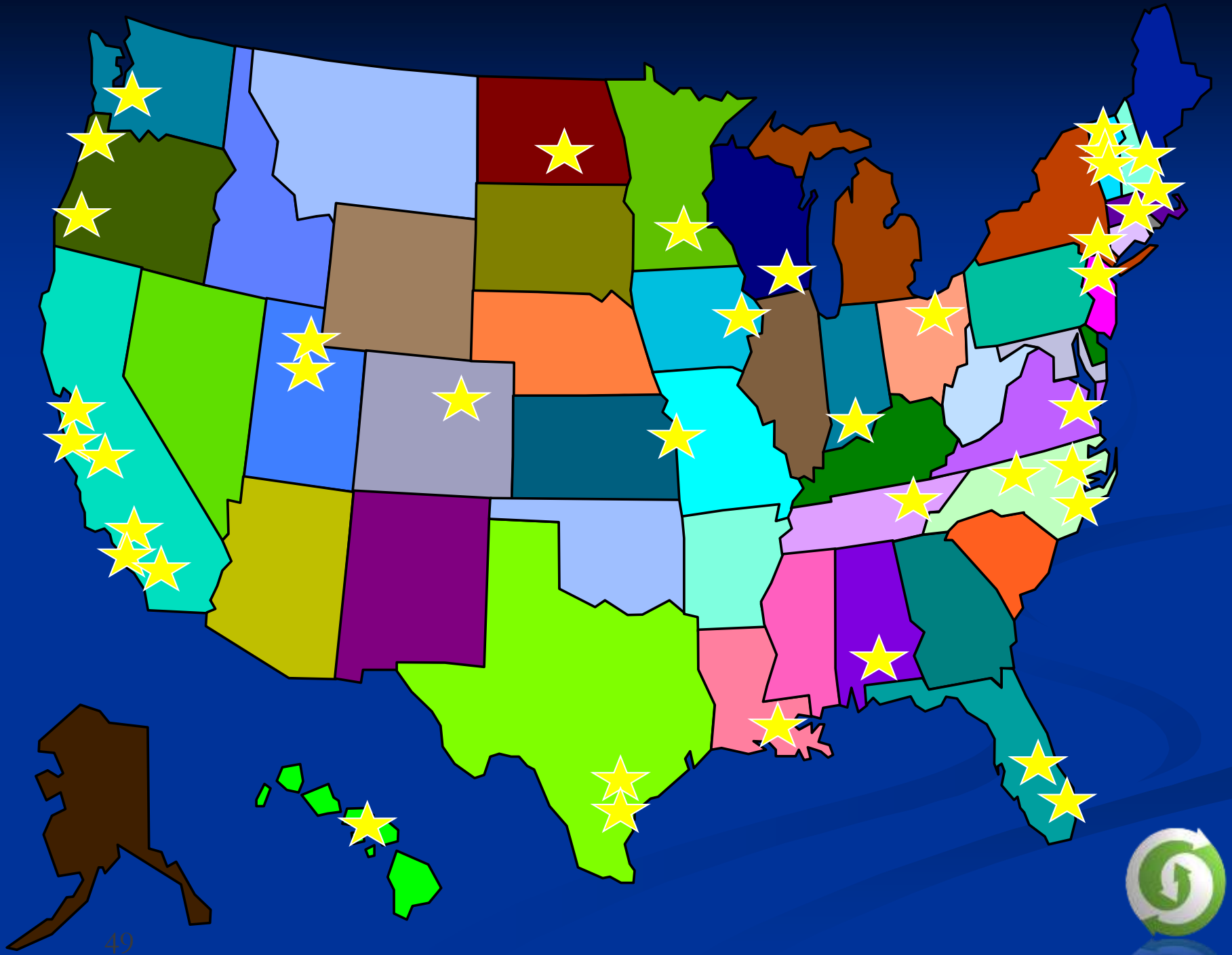
Ken Resnicow, PhD, Alison Bocian, MS, Donna Harris, MA, Robert Schwartz, MD, Linda Snetselaar, PhD, RD, Esther Myers, PhD, RD, Jaquelin Gotlieb, MD, Susan Woolford, MD, MPH, Richard Wasserman, MD, MPH

Funding provided by a grant from National Heart Lung and Blood Institute (R01HL085400), PROS core funding from the Health Resources and Services Administration Maternal and Child Health Bureau (R60MC00107) and the American Academy of Pediatrics

eat right. Academy of Nutrition and Dietetics

M SPH University of Michigan School of Public Health

Thank you to participating PROS practices!



Study Overview

Overall Enrollment

n= 42 practices

n= 645 patients

Group 1 Usual Care	Group 2 Pediatricians	Group 3 Pediatricians and RDs
n= 11 practices	*n= 16 practices*	*n= 15 practices*
n= 198 patients	n= 212 patients	n= 235 patients
Lost to follow-up *1 practice* 40 patients	Lost to follow-up *3 practices* 67 patients	Lost to follow-up *1 practice* 81 patients
Analyzed n=158 patients (80%)	Analyzed n=145 patients (68%)	Analyzed n=154 patients (66%)

Intervention Elements

- 2-day MI training
- MI booster training DVD
- Parent Behavior Screener
  - Identify Target Behaviors
- Autonomy Supportive Materials
  - Tip Sheets (Optional)
  - Diaries (Optional)
- Autonomy Supportive Skills (MD to Parent)
  - You Provide They Decide
    - Engagement-Choice

http://chcr.umich.edu/project.php?id=1032

MI Proficiency

- 2x-3x R to Q ratio
- Support parent and child autonomy
- Affirm effort
- Elicit *Change Talk*
- Link behavior to roles and goals
- Undersell advice
- Provide menu of options

Behavioral Approach: Discrete Targets vs. Prescription

- Snack foods
- Sweetened beverages
- Fruits
- Vegetables
- Screen time
- Physical activity

SAMPLE PARENT Q

Current Eating/Exercise Self-Assessment For Your Child

22) For each of the behaviors below, please grade how your child is doing from A (great/ healthy) to F (poor/unhealthy)

	A	B	C	D	F	Comments
	Great / Healthy				Poor / Unhealthy	
a. Snack foods	X					
b. Drinking sweetened beverages				X		
c. Eating out/carry out dinners		X				
d. Eating fruits				X		
e. Eating vegetables		X				
f. Watching TV/ screen time		X				
g. Playing video games / internet games	X					
h. Physical activity/exercise			X			

Phrases that *HELP* and *HINDER*

**As the caregiver, you play the biggest role in your child's eating behavior.
What you say has an impact on developing healthy eating habits.
Negative phrases can easily be changed into positive, helpful ones!**

MyPyramid for Preschoolers
MyPyramid.gov

Phrases that *HINDER*

INSTEAD OF ...

Eat that for me.
If you do not eat one more bite, I will be mad.

Phrases like these teach your child to eat for your approval and love. This can lead your child to have unhealthy behaviors, attitudes, and beliefs about food and about themselves.

INSTEAD OF ...

You're such a big girl; you finished all your peas.
Jenny, look at your sister. She ate all of her bananas.
Your have to take one more bite before you leave the table.

Phrases like these teach your child to ignore fullness. It is better for kids to stop eating when full or satisfied than when all of the food has been eaten.

INSTEAD OF ...

See, that didn't taste so bad, did it?

This implies to your child that he or she was wrong to refuse the food. This can lead to unhealthy attitudes about food or self.

INSTEAD OF ...

No dessert until you eat your vegetables.
Stop crying and I will give you a cookie.

Offering some foods, like dessert, in reward for finishing others, like vegetables, makes some foods seem better than others. Getting a food treat when upset teaches your child to eat to feel better. This can lead to overeating.

Phrases that *HELP*

TRY ...

This is kiwi fruit; it's sweet like a strawberry.
These radishes are very crunchy!

Phrases like these help to point out the sensory qualities of food. They encourage your child to try new foods.

TRY ...

Is your stomach telling you that you're full?
Is your stomach still making its hungry growling noise?
Has your tummy had enough?

Phrases like these help your child to recognize when he or she is full. This can prevent overeating.

TRY ...

Do you like that?
Which one is your favorite?
Everybody likes different foods, don't they?

Phrases like these make your child feel like he or she is making the choices. It also shifts the focus toward the taste of food rather than who was right.

TRY ...

We can try these vegetables again another time. Next time would you like to try them raw instead of cooked?
I am sorry you are sad. Come here and let me give you a big hug.

Reward your child with attention and kind words. Comfort him or her with hugs and talks. Show love by spending time and having fun together.

Adapted from "What You Say Really Matters?" in *Feeding Young Children in Group Settings*, Dr. Janice Fletcher and Dr. Laurel Branen, University of Idaho.

Autonomy Support: Parent to Child

YOU PROVIDE THEY DECIDE

- TV/Screen Time
  - You set limit (can be collaborative)
  - They decide when and how to cash in
- Treats/Sweet Drinks/Fast Food
  - You set limit (can be collaborative)
  - They decide when and how to cash in

Baseline Sample Description By Study Group

		Group 1	Group 2	Group 3	Total
		Control	MD	MD+RD	
		(n= 198)	(n=212)	(n=235)	(n=645)
Mean Child Age (sd)*		4.87 (1.72)	5.08 (1.94)	5.32 (1.78)	5.10 (1.82)
Mean Child BMI percentile (sd)		**91.50 (3.29)**	**92.17 (3.26)**	**92.09 (3.44)**	**91.93 (3.34)**
Parent BMI (sd) *		28.43(6.77)	30.13 (7.43)	28.48 (6.43)	29.01 (6.91)
Child Gender	% Male	47.0	42.9	39.6	42.9
	% Female	53.0	57.2	60.4	57.2
Parent Completing Questionnaire**					
	% Mother	87.2	92.4	91.7	90.5
	% Father	12.2	4.3	7.5	7.9
	% Other	0.5	3.3	0.9	1.6
Child Race **					
	% White	67.9	53.6	59.1	60.0
	% Black	2.6	11.0	6.1	6.6
	% Hispanic	13.3	30.1	20.9	21.6
	% Asian	6.63	1.4	8.7	5.7
	%Other	9.7	3.8	5.2	6.1
Household Income*					
	% < $ 40,000	27.2	38.6	29.8	31.9
	% >=$ 40,000	72.8	61.4	70.2	68.1
Parent Education **					
	% < College	61.8	70.1	52.6	61.2
	% College or higher	38.2	29.9	47.4	38.9
Child Insurance Coverage					
	% Any	99.5	98.1	97.3	98.3
	% Private*	74.0	59.8	65.9	66.4
	% Medicaid **	17.4	36.4	23.0	25.7

* $p < .05$ ** $p < .01$

Results for BMI Percentile

Year 2 BMI Percentile and BMI Percentile Change by Study Group			
Study Group	N	Year 2 BMI Percentile^ (SE)	BMI Percentile Difference#^ (SE)
Group 1 – Usual Care	158	90.3^{1} (0.94)	1.8^{2} (0.98)
Group 2 –PCP	145	88.1 (0.94)	3.8 (0.96)
Group 3 –PCP & RD	154	87.1^{1} (0.92)	4.9^{2} (0.99)

Groups with matching superscripts differ $p < .05$
Subtracting post-intervention BMI percentile from baseline BMI percentile.
^ Adjusted for age, race, sex, baseline BMI, household income, parent BMI, provider age, and practice effects (clustering)

Results using Raw BMI

Year 2 BMI by Study Group		
Study Group	N	Year 2 Raw BMI (SE)
Group 1 – Usual Care	158	19.75^{1} (0.17)
Group 2 –PCP	145	19.33 (0.18)
Group 3 –PCP & RD	154	19.17^{1} (0.17)

Groups with matching superscripts differ $p < .05$

^ Adjusted for age, race, sex, baseline BMI, parent BMI, income, provider age, and practice effects (clustering)

BMI[2]: Behavioral Outcomes^ at 2-year Follow-up

Study Group	Fruit & Veg Serving p/day	Sweet Beverages Serving p/day	Physical Activity Hrs. p/day	Screen Time Hrs. p/Day
Control	3.8 [1] (.12)	2.1 (.05)	1.3 (.11)	2.5[1] (.10)
PCP only	4.1 (.14)	1.9 (.06)	1.3 (.11)	2.4[2] (.11)
PCP + RD	4.3[1] (.13)	2.1 (.06)	1.0 (.12)	2.2[1,2](.10)

^ Adjusted for age, race, sex, baseline value, and practice effect

Number and Percent of MI Contacts Completed by Intervention Group in BMI[2]

GROUP	Number and Percent of MI Contacts Completed						
	0	1	2	3	4	5	6
GROUP 2 PCP (n =145)	3 2.1%	14 9.7	8 5.%	14 9.7%	106 73.1%	NA	NA
GROUP 3 PCP (n =154)	3 1.9%	18 11.7%	17 11.0%	12 7.8%	104 67.5%	NA	NA
GROUP 3 RD (n =154)	21 13.6%	24 15.6%	29 18.8%	30 19.5%	*22* *14.3%*	*9* *5.8%*	*19* *12.3%*

32.4% of families received 4 or more RD calls.

Baseline to Year 2 BMI Percentile Change by Completed# MI Dose in BMI[2], 2009-2013

Study Group Dose	(n=425)	Adherence Adjusted^^ BMI Percentile Δ Mean (SE)
Control	149	1.7[1,2]
Group 2 Low < 3 MI	23	3.2
Group 2 High > =3 MI	112	4.2
Group 3 Low < 8 MI	104	4.6[1]
Group 3 High >= 8 MI	37	5.5[2]

^ adjusted for age, race, sex

^^ adjusted for sex, age, income, education, race, and psychosocial predictors of adherence.

- High Dose defined as 75% of expected sessions.

Patient Report of Physician Counseling: Adapted HCCQ

How much do you agree or disagree with the following statements?

	Not At all	A Little	Some-what	A Lot	Can't Say
The doctor asked my opinion about things.	**0**	**1**	**2**	**3**	
My doctor gave me choices about what to do.					
The doctor understands what I am saying.					
The doctor listened to me.					
The doctor rushed me through the interview.					
The doctor asked too many questions.					
The doctor asked permission before giving me information or advice.					
The doctor was supportive/ encouraging.					
The doctor and I discussed the values that are important to me.					
The doctor left it up to me to decide whether or not to make changes in food or television viewing.					
The doctor helped me to think about why changing my food habits might be important to my family.					
The doctor helped me to think about why changing my television habits might be important to my family.					
The doctor helped me feel like I could make changes in my food or television habits, if I wanted to.					

Patient Report of RD Counseling: Adapted HCCQ

How much do you agree or disagree with the following statements?

	Not At All	A Little	Some-what	A Lot	Can't Say
The dietitian asked my opinion about things.	**0**	**1**	**2**	**3**	
My dietitian gave me choices about what to do.					
The dietitian understands what I am saying.					
The dietitian listened to me.					
The dietitian rushed me through the interview.					
The dietitian asked too many questions.					
The dietitian asked permission before giving me information or advice.					
The dietitian was supportive/ encouraging.					
The dietitian and I discussed the values that are important to me.					
The dietitian left it up to me to decide whether or not to make changes in food or television viewing.					
The dietitian helped me to think about why changing my food habits might be important to my family.					
The dietitian helped me to think about why changing my television habits might be important to my family.					
The dietitian helped me feel like I could make changes in my food or television habits, if I wanted to.					
I felt pressured by my dietitian to make changes.					

Patient Report of MD and RD Counseling at End of Study

SCALE	# Items	Mean (0-3)	Alpha
MD COMMUNICATION (Year 1)	14	2.7	.74
RD COMMUNICATION (Year 1)	14	2.5	.89
MD COMMUNICATION (Year 2)	14	2.7	.79
RD COMMUNICATION (Year 2)	14	2.5	.91

Who talked more…..	MD HCCQ SCORE *
I talked more than my MD	2.8
The doctor talked more than me	2.3
We talked about the same amount of time	2.8

* P < .05

MD Visits changed how I think about my child's health	MD HCCQ SCORE *
NOT AT ALL	2.5
A LITTLE	2.6
SOMEWHAT	2.7
ALOT	2.8

* P < .01

RD Visits changed how I think about my child's health	RD HCCQ SCORE *
NOT AT ALL	1.6
A LITTLE	2.5
SOMEWHAT	2.7
ALOT	2.8

* P < .01

Strengths

- National study ↑ generalizability
- Realistic dose
- Physical outcome

Limitations

- Attrition (30%)
- Low completion of RD MI
- Lack rigorous diet and activity measures
- Lack of other biologic data
- Unexpected large change in UC group

AAP Dissemination Study 2016-2021

(HL128231-01A1)

Primary Aims

- Test the effectiveness of an enhanced version of the BMI^2 intervention disseminated through PROS practices.

- Examine the impact of the enhanced intervention (defined as change in BMI z) on the entire population of overweight and obese youth ages 3-10 in 16-18 PROS practices that did not participate in the parent BMI^2 study.

OVERIVEW

- Cluster-randomized effectiveness trial, with 16-18 PROS practices

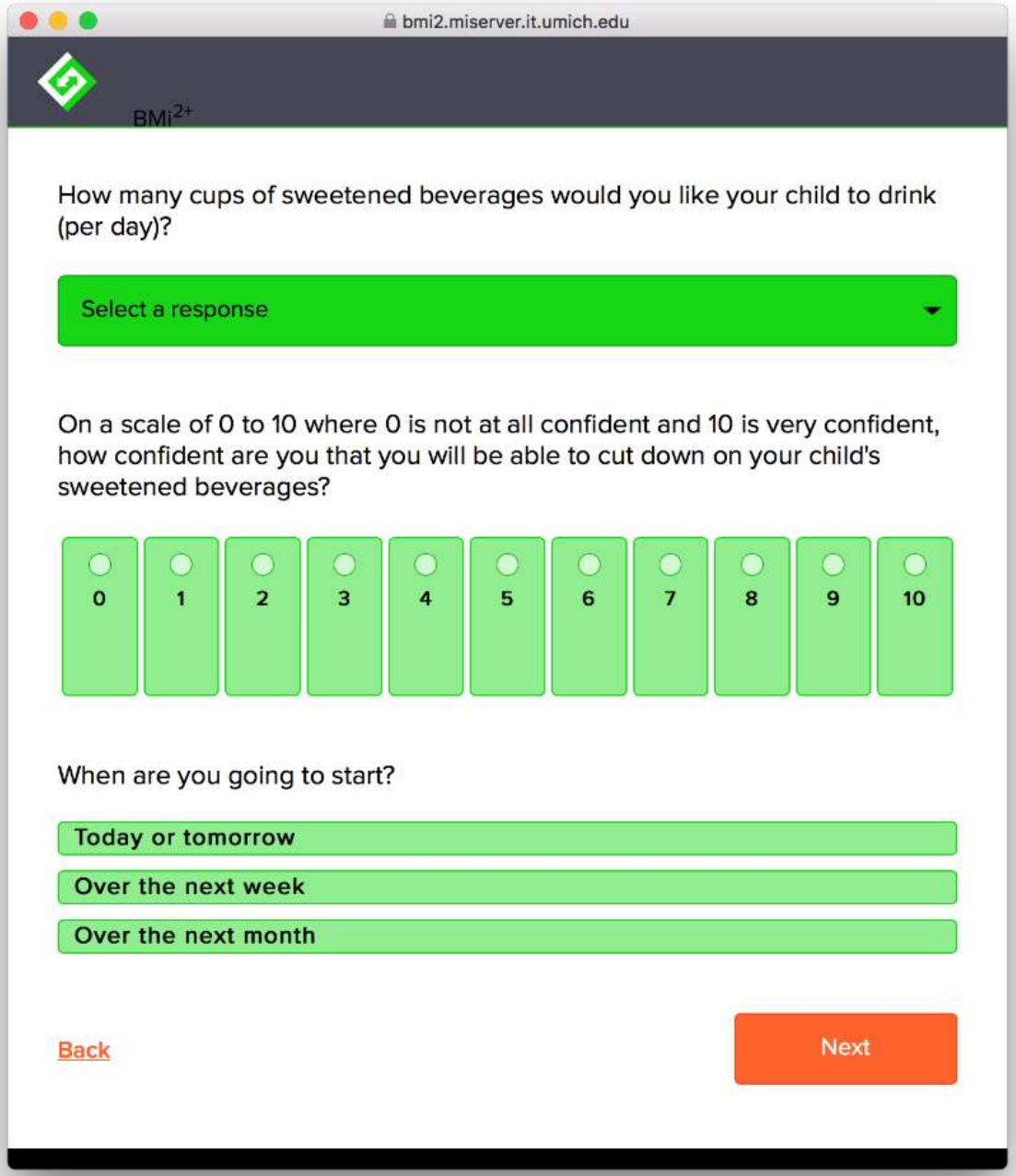
- PCPs deliver 4 MI sessions in person.
- RDs deliver 6 MI sessions by phone
- KR Trains PCPs and RDs

- Electronically approach all eligible families (> 85th percentile) at least once per year
- Usual care practices will begin BMI^2 two years later

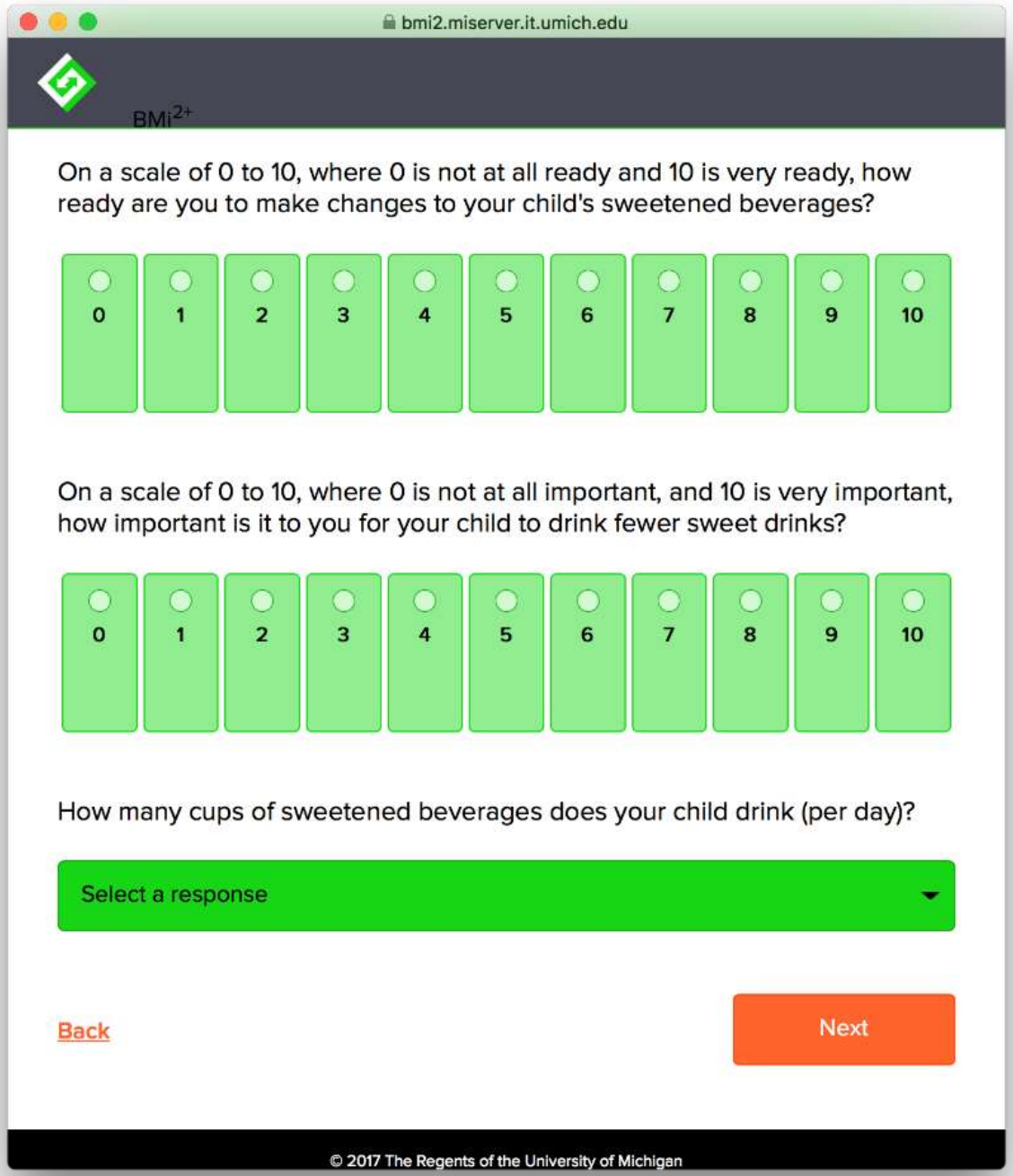
Key Changes

- **Centralized delivery of RD intervention**: RD intervention will be delivered via a centralized telephone-based disease management system, based at the University of Michigan (U of M).
- **Text messaging:** Two-way tailored text messaging (SMS) delivered from the CHCR. Parents will receive 1-2 messages per week, tailored to the behaviors addressed in the RD and PCP MI sessions.
- **Intervention Portal:** Clinical tracking "portal" to maximize completion of intervention sessions and facilitate communication between RDs, PCPs and parents.
- **Integration** with PCC Medical Record
- Billing support and training to maximize revenue

RD Counselor APP



RD Counselor APP



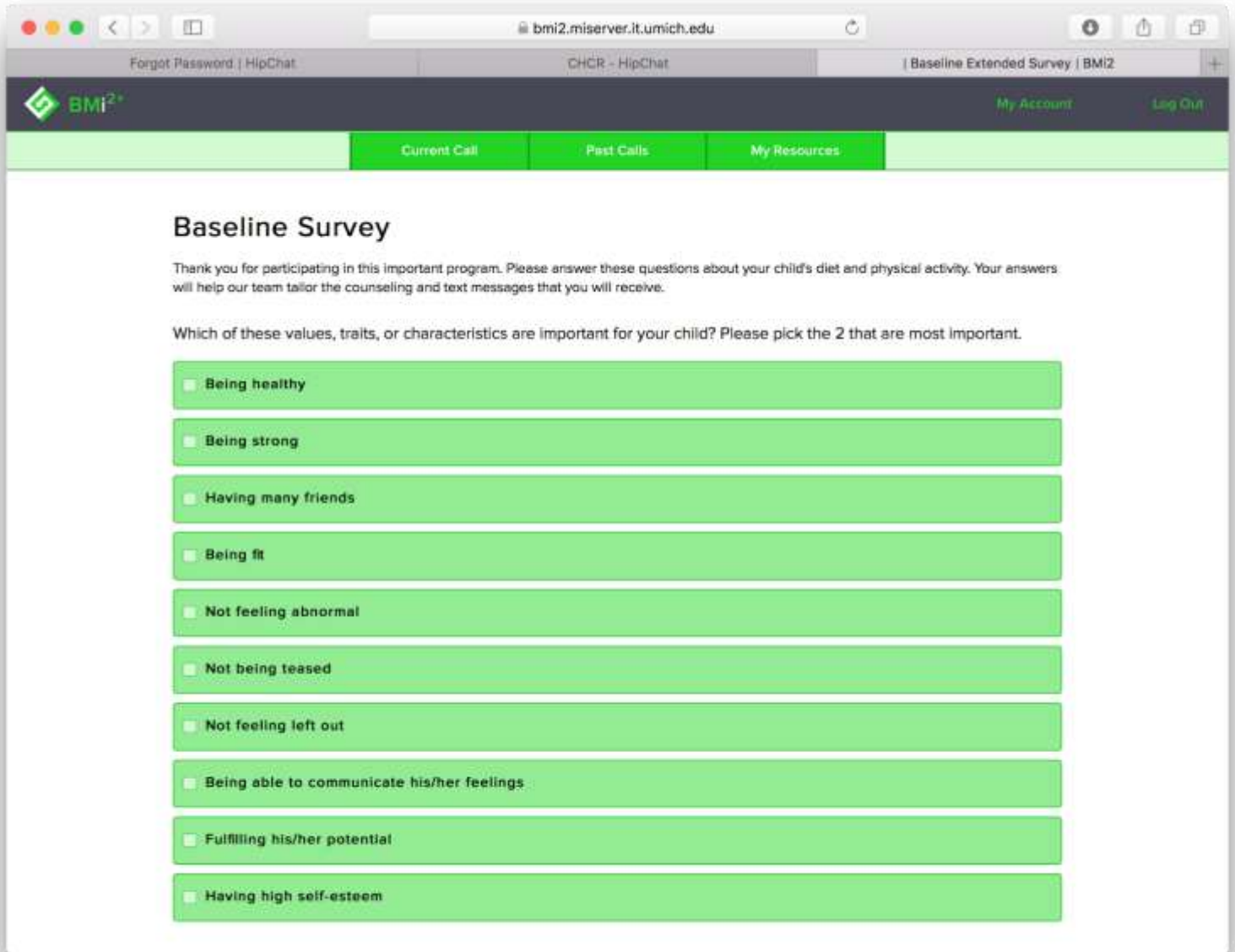
RD Counselor APP

Which of these values, traits, or characteristics are important for your family? Please pick the 2 that are most important.

- [ ] Being Cohesive
- [ ] Being healthy
- [ ] Having peaceful meals
- [ ] Getting along
- [ ] Spending time together

Next

RD Counselor APP



RD Counselor APP

Which of these values, traits, or characteristics are important to you? Please pick the 2 that are most important.

- [ ] Being a good parent
- [ ] Being responsible
- [ ] Being disciplined
- [ ] Being a good spouse
- [ ] Being respected at home
- [ ] Being on top of things
- [ ] Being spiritual

Communicating RD to PCP

BMi²

Fax Summary

Call Time:
May 2, 2017, 5:30 p.m.

Summary Notes to Physician
Child's Name: Jonathan Greggs

BMI2+ Patient Update

A BMI2+ dietitian recently had a phone call with one of your patients. As promised, we'd like to provide a summary of that encounter.

Rachel Jones chose the goal area of sugar sweetened beverages to work on with Jonathan. She set a goal for Jonathan to reduce his number of sugary beverages to 2 per day.

- Readiness to make a change is 8 out of 10.
- Importance is 6 out of 10.
- Confidence is 4 out of 10.

Dietitian Notes: Rachel stated that Jonathan is currently drinking 5-6 sweet drinks per day. She would like him to cut out 3-4 sugary drinks per day. We brainstormed ways she can get Jonathan to carry a water bottle with him. We also talked about using watered down Crystal Light as a substitution for fruit drinks. Rachel suggested the family activity of cutting up fresh fruit to add to water.

Thanks,

The BMI2+ Study team

Physician Communication Techniques and Weight Loss in Adults
Project CHAT

Kathryn I. Pollak, PhD, Stewart C. Alexander, PhD, Cynthia J. Coffman, PhD, James A. Tulsky, MD, Pauline Lyna, MPH, Rowena J. Dolor, MD, MHS, Iguehi E. James, MPH, Rebecca J. Namenek Brouwer, MS, Justin R.E. Manusov, BA, Truls Østbye, MD, PhD

Background: Physicians are encouraged to counsel overweight and obese patients to lose weight.

Purpose: It was examined whether discussing weight and use of motivational interviewing techniques (e.g., collaborating, reflective listening) while discussing weight predicted weight loss 3 months after the encounter.

Methods: Forty primary care physicians and 461 of their overweight or obese patient visits were audio recorded between December 2006 and June 2008. Patient actual weight at the encounter and 3 months after the encounter ($n=426$); whether weight was discussed; physicians' use of motivational interviewing techniques; and patient, physician, and visit covariates (e.g., race, age, specialty) were assessed. This was an observational study and data were analyzed in April 2009.

Results: No differences in weight loss were found between patients whose physicians discussed weight or did not. Patients whose physicians used motivational interviewing–consistent techniques during weight-related discussions lost weight 3 months post-encounter; those whose physician used motivational interviewing–inconsistent techniques gained or maintained weight. The estimated difference in weight change between patients whose physician had a higher global motivational interviewing–Spirit score (e.g., collaborated with patient) and those whose physician had a lower score was 1.6 kg (95% CI=−2.9, −0.3, $p=0.02$). The same was true for patients whose physician used reflective statements: 0.9 kg (95% CI=−1.8, −0.1, $p=0.03$). Similarly, patients whose physicians expressed only motivational interviewing–consistent behaviors had a difference in weight change of 1.1 kg (95% CI=−2.3, 0.1, $p=0.07$) compared to those whose physician expressed only motivational interviewing–inconsistent behaviors (e.g., judging, confronting).

Conclusions: In this observational study, use of motivational interviewing techniques during weight loss discussions predicted patient weight loss.

(Am J Prev Med 2010;39(4):321–328)

Physician Communication Techniques and Weight Loss in Adults, Project CHAT

Pollak, Kathryn I, et al.

Purpose:

Longitudinal, observational study to examine;

1) Whether weight was discussed as part of preventive counseling in overweight patients

2) To see if Motivational Interviewing (MI) techniques used during weight discussion predicted weight loss at 3 months after the counseling session.

Methods:

- Forty primary care physicians recruited and told the study was on preventive health (not weight loss specifically), to prevent bias.
- Patients recruited based on physicians clinic roster review to identify patients scheduled for non acute visits.
- Each physician counseled 11-12 overweight or obese patients, totaling to 461 audio recorded sessions.
- Three primary weight related topics were coded to determine presence of counseling (nutrition, physical activity, BMI/weight).

Methods:

- MI assessed with the Motivational Interview Treatment Integrity Scale (MITI).

- In those patients who DID receive weight loss counseling, researchers looked at the association with each of the 5 MI criteria and weight loss.

  (1) MI spirit (score >1)
  (2) empathy (score >1)
  (3) open questions
  (4) any simple or complex reflections
  (5) behaviors consistent and inconsistent with MI.

Revised Global Scales: Motivational Interviewing Treatment Integrity 3.1.1 (MITI 3.1.1)

T.B. Moyers, T. Martin, J.K. Manuel, W.R. Miller, & D. Ernst
University of New Mexico
Center on Alcoholism, Substance Abuse and Addictions (CASAA)

Global Ratings

Evocation		1 Low	2	3	4	5 High
Collaboration		1 Low	2	3	4	5 High
Autonomy/ Support		1 Low	2	3	4	5 High
Direction		1 Low	2	3	4	5 High
Empathy		1 Low	2	3	4	5 High

❖Model 2a: Patients whose physician had a high MI-spirit score lost an estimated 1.4 kg (95% CI:2.6, 0.2), while those whose physician had a low MI-spirit score gained an estimated 0.2 kg (95%CI:0.2, 0.6).

❖Model 2b: Patients whose physician used reflective listening in their encounter lost an estimated 0.5 kg (95% CI:1.2, 0.1), while those whose physician did not use reflective listening gained an estimated 0.4 kg (95% CI:0.1, 0.9).

❖Model 2e: the MI–inconsistent proportion was fixed at 0 and 1, respectively. Patients whose physician used only MI–consistent behaviors in their encounter lost an estimated 0.8 kg (95% CI:1.8, 0.1), while those whose physician used only MI–inconsistent behaviors gained an estimated 0.3 kg (95% CI:0.3, 0.3).

→ The higher the MI–inconsistent proportion, the less weight loss occurred.

Table 4. Estimated mean weight and differences in weight change over 3 months in kg from models including patient-, physician-, and visit-level covariates

Model	Estimated weight (kg; M, SE)		Estimated difference in weight change (95% CI)[a]	*p*-value
	Baseline	3-month		
2a				
Motivational interviewing–spirit>1	95.4, 2.7	94.0, 2.7		
Motivational interviewing–spirit=1	91.4, 1.0	91.6, 1.0	−1.6 (−2.9, −0.3)	0.02
2b				
Reflections	93.2, 1.5	92.7, 1.5		
No reflections	91.0, 1.2	91.4, 1.2	−0.9 (−1.8, −0.1)	0.03
2c				
Open questions	92.9, 1.5	92.9, 1.5		
No open questions	91.2, 1.2	91.1, 1.2	0.1 (−0.8, 0.9)	0.86
2d				
Empathy>1	101.4, 3.8	100.5, 3.8		
Empathy=1	91.2, 1.0	91.1, 1.0	−1.0 (−2.8, 0.8)	0.26
2e				
Motivational-interviewing behaviors				
Motivational interviewing–consistent only[b]	91.8, 2.3	91.0, 2.3		
Motivational interviewing–inconsistent only	91.4, 1.3	91.7, 1.3	−1.1 (−2.3, 0.1)	0.07
No motivational-interviewing behaviors	88.5, 3.4	89.4, 3.4	0.9 (−0.6, 2.5)	0.25

Note: The sample n=429 includes all patients except 32 with missing data, intraclass correlation coefficient=0.0.

[a]Difference in change in weight between baseline and 3 months between the groups (i.e., the motivational interviewing–spirit group loses weight over 3 months and the no motivational interviewing–spirit groups gains weight); the difference in weight changes is 1.6 kg (estimate from contrast set up in the model of the motivational interviewing by time interaction term).

[b]For Model 2e, the motivational interviewing–inconsistent proportion was fixed at 0 and 1, respectively, to get estimates for the group with motivational interviewing–consistent behaviors only and the group with motivational interviewing–inconsistent behaviors only.

MI Duality

STYLE	TECHNIQUE
Autonomy Support	Agenda Setting
Choice	Open Questions
Empathy	Reflective Listening
Collaboration	Manufacturing Change Talk
Evoke vs. Persuade	Rulers/Values

MOTIVATIONAL INTERVIEWING

A collaborative, goal-oriented method of communication with particular attention to the language of change. It is designed to strengthen an individual's motivation for and movement toward a specific goal by eliciting and exploring the person's own arguments for change.

Miller and Rollnick, 2013

MOTIVATIONAL INTERVIEWING

"client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence"

Rollnick and Miller, 2001

MOTIVATIONAL INTERVIEWING

"an egalitarian, empathetic, and client-centered way of being that manifests through specific techniques and strategies, e.g. reflective listening, shared agenda setting"

Resnicow et al, 2002

Vansteenkiste et al. International Journal of Behavioral Nutrition and Physical Activity 2012, 9:23
http://www.ijbnpa.org/content/9/1/23

INTERNATIONAL JOURNAL OF BEHAVIORAL NUTRITION AND PHYSICAL ACTIVITY

METHODOLOGY Open Access

Toward systematic integration between Self-Determination Theory and Motivational Interviewing as examples of top-down and bottom-up intervention development: Autonomy or volition as a fundamental theoretical principle

Maarten Vansteenkiste[1*], Geoffrey C Williams[2] and Ken Resnicow[3]

MI: A Practice Looking a Theory

SDT: A Theory Looking for a Practice

www.selfdeterminationtheory.org

Psychological Needs: Supporting Optimal Motivation

- Autonomy
  - The need to feel choiceful and volitional in one's behavior
- Competence
  - The need to feel optimally challenged and capable of achieving outcomes
- Relatedness
  - The need to feel connected to and understood by important others

Deci & Ryan, 1991, 2000
Ryan & Deci, 2000

Motivation

- Autonomous motivation
  - Behaviors are chosen, and volitional
  - Behaviors are performed for their inherent value
- Controlled motivation
  - Behaviors are pressured or coerced
  - Behaviors are performed for some separable outcome

Ryan & Deci, 2000; Deci & Ryan, 1991, 1995
Sheldon, Ryan, Rawsthorne, & Ilardi, 1997
Nix, Ryan, Manly, & Deci, 1991
Ryan, Deci, & Grolnick, 1995

A Strong "Why": Three Components of Quality Motivation

I am doing it because…….

- I decided to.
- It is important to me.
- I have the ability to do so.

A Weak "Why": Components of Low Quality Motivation

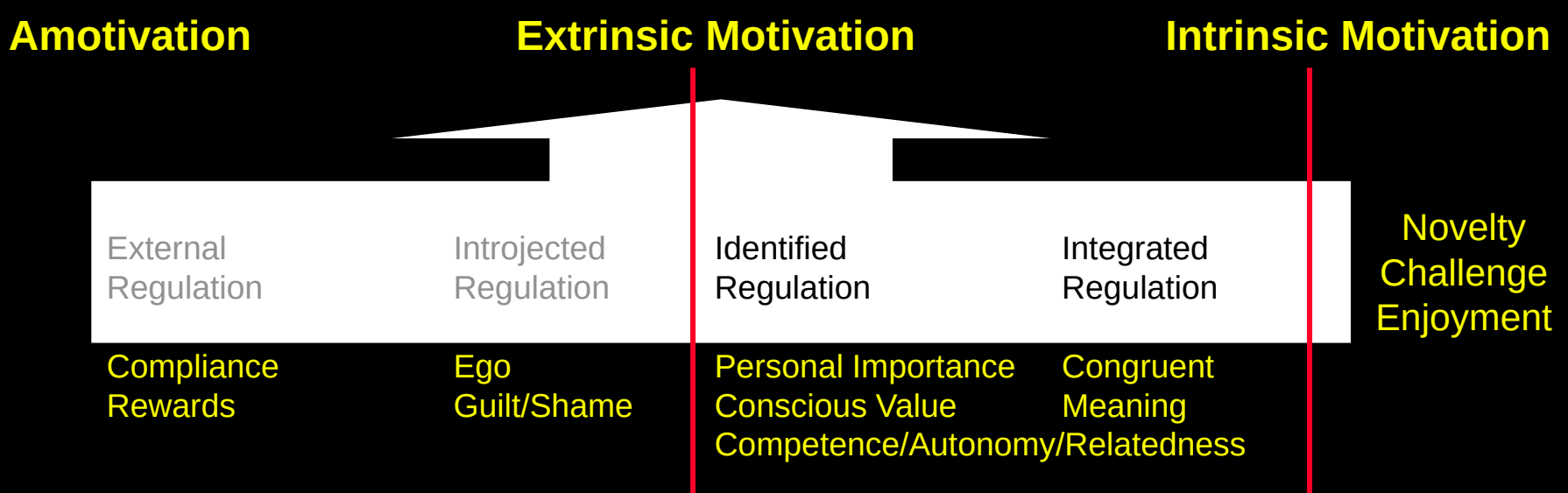
I am doing it because……

- I feel guilty
- I feel pressured
- Someone else convinced me
- I am not sure I really want to
- I am not sure I really can

Intrinsic-Extrinsic Continuum

NOT SELF-DETERMINED

COMPLETELY SELF-DETERMINED



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ASSOCIATION FOR PSYCHOLOGICAL SCIENCE

Self-Determination Theory Applied to Health Contexts: A Meta-Analysis

Perspectives on Psychological Science
7(4) 325–340

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http://pps.sagepub.com
SAGE

Johan Y. Y. Ng[1], Nikos Ntoumanis[1], Cecilie Thøgersen-Ntoumani[1], Edward L. Deci[2], Richard M. Ryan[2], Joan L. Duda[1], and Geoffrey C. Williams[2]
[1]University of Birmingham and [2]University of Rochester

Assessing Motivation

The reason I eat fruit and vegetables is:	Subscale
1. Because I want to take responsibility for my own health.	1
2. Because I would feel guilty or ashamed of myself if I didn't.	2
3. Because I personally believe it is a good thing for my health.	1
4. Because others would be upset with me if didn't	2
5. I really don't think about it.	3
6. Because I have carefully thought about it and believe it is very important for me	1
7. Because I would feel bad about myself if I didn't.	2
8. Because it is an important choice I really want to make.	1
9. Because I feel pressure from others to eat fruit and vegetables.	2
10. Because it is easier to do what I am told than think about it.	3
11. Because it is consistent with my life goals.	1
12. Because I want others to approve of me.	2
13. Because it is important for being as healthy as possible.	1
14. Because I want others to see I can do it.	2
15. I don't really know why.	3
16. Because not doing so puts me at great health risk. (experimental)	1
17. Because my family wants me to. (experimental)	2

Adapted from Williams G, et al Univ of Rochester

Subscales to Intrinsic Motivational Scale

1. Autonomous Response
2. Controlled Response
3. Amotivational Response

The Health Care Climate Questionnaire (HCCQ)

I feel that my physician has provided me choices and options.

My physician conveys confidence in my ability to make changes.

I feel that my physician accepts me.

My physician has made sure I really understand about my condition and what I need to do.

My physician encourages me to ask questions.

My physician listens to how I would like to do things.

My physician tries to understand how I see things before suggesting a new way to do things.

Table 2. Meta-Analyzed Correlations Between Autonomy Supportive and Controlling Health Care Climates, Basic Psychological Needs, Behavioral Regulations and Indicators of Mental and Physical Health

	AS	Con climate	Aut	Com	Rel	IM	IG	ID	IJ	EX	AM	Aut reg	Con reg
Mental health													
Depression	−.23 (5)	—	−.50[b] (1)	−.20 (6)	−.45[b] (1)	−.14 (2)	−.07 (2)	−.12[a] (3)	.24 (4)	.23 (4)	.13 (4)	−.06 (7)	.16 (2)
Anxiety	−.23 (4)	.44[b] (1)	−.23 (4)	−.32 (7)	−.30 (4)	−.24 (5)	−.33[b] (1)	−.13 (5)	.26 (5)	.30 (5)	.16 (4)	−.09 (3)	.46[b] (1)
Quality of life	.22 (2)	—	.40[b] (1)	.40 (2)	.38[b] (1)	.40 (2)	—	.33 (2)	−.03[a] (2)	−.21 (2)	−.28 (2)	.22[b] (1)	—
Vitality	.35 (4)	—	.35 (5)	.43 (5)	.38 (5)	.48 (3)	.35[b] (1)	.44 (3)	−.07 (3)	−.12[a] (3)	−.13 (2)	.26 (2)	—
Positive affect	.37 (4)	—	.35 (7)	.54 (7)	.53 (6)	.62 (7)	.45 (5)	.62 (7)	.13 (7)	−.16 (7)	−.20 (5)	—	—
Negative affect	−.17 (4)	—	−.32 (7)	−.33 (7)	−.28 (6)	−.28 (5)	−.05 (3)	−.09 (5)	.26 (5)	.36 (5)	.38 (3)	—	—
Physical health													
Smoking abstinence	.12 (4)	—	.11[b] (1)	.30 (3)	—	—	.11[b] (1)	.07[b] (1)	.05[b] (1)	−.05[b] (1)	.00[b] (1)	.16 (7)	.08 (3)
Exercise/physical activity	.23 (30)	—	.15 (23)	.36 (30)	.14 (19)	.32 (51)	.26 (8)	.36 (48)	.18 (52)	−.03 (52)	−.24 (25)	.20 (16)	.01[a] (11)
Weight loss	.28 (2)	—	.22[b] (1)	.22 (3)	—	.24 (4)	—	.30 (2)	.08[a] (2)	.00[a] (2)	—	.38 (3)	.02 (2)
Glycemic control	.08 (5)	—	—	.17 (4)	—	—	—	—	—	—	—	.14 (4)	.06[a] (2)
Medication adherence	.08 (2)	—	—	.17 (3)	—	—	—	—	—	—	—	.11 (4)	—
Healthy diet	.29 (3)	—	.13[a] (2)	.07[a] (2)	.14[a] (2)	.41 (4)	.67 (2)	.43 (3)	.16 (4)	.06[a] (4)	−.21[a] (4)	.41 (7)	.04[a] (8)
Dental hygiene	.39 (3)	−.18[b] (1)	.20[b] (1)	.53 (2)	.09[b] (1)	—	.35[b] (1)	.24[b] (1)	−.01[b] (1)	−.09[b] (1)	−.26[b] (1)	.23[b] (1)	—

Note: AS = Autonomy supportive health care climate, Con climate = Controlling health care climate, Aut = Autonomy need satisfaction, Com = Competence need satisfaction, Rel = Relatedness need satisfaction, IM = Intrinsic motivation, IG = Integrated regulation, ID = Identified regulation, IJ = Introjected regulation, EX = External regulation, AM = Amotivation, Aut reg = Composite autonomous self-regulation (i.e., intrinsic motivation and identified regulation), Con reg = Composite controlled regulation (i.e., introjected and external regulations). A dash (—) indicates that no studies included in the meta-analysis had measured the association between the corresponding constructs. The number of meta-analyzed studies (*k*) is presented in parentheses.
[a]A true effect may not exist as the corresponding 95% confidence interval encompasses 0. [b]Effect size was obtained from one study only; no confidence intervals could be generated.

Ng JYY, Ntoumanis N, Thøgersen-Ntoumani C, et al. Self-Determination Theory Applied to Health Contexts: A Meta-Analysis. *Perspectives on Psychological Science. July 1, 2012 2012;7(4):325-340.*

Does Health Education Cause Harm?

STUDY PARAMETERS

- 659 problem drinkers in Northern California
  - ❖ General population sample (n=239)
  - ❖ Treatment sample (n=420)
- Assessed 1-, 3-, and 5-years post-baseline

At 1-year follow-up, respondents drinking 'a lot less' were read a list of potential reasons why.

1. you decided that your drinking was causing you health problems
2. you decided that you hit rock bottom with your drinking
3. you had a traumatic experience
4. ***you weighed the pros and cons of drinking***
5. you were affected by seeing someone drunk or high
6. someone you knew quit or reduced their drinking
7. your doctor warned you to stop or cut down
8. your spouse or partner warned you to stop or cut down
9. you had a major change in your life-style, such as in your job, family or personal life
10. ***you had a religious or spiritual experience.***

Matzger, H., L. A. Kaskutas, et al. (2005). Reasons for drinking less and their relationship to sustained remission from problem drinking. Addiction 100 (11): 1637-46.

Table 2 Logistic regression analyses of remission from problem drinking (did not meet problem drinker criteria at any follow-up).

	General population sample (n = 239)		*Treatment sample (n = 420)*	
	OR	*(95% CI)*	*OR*	*(95% CI)*
Demographic measures				
Age (versus 25 or under)				
26–39	**3.22**	(1.41–7.37)	0.93	(0.39–2.24)
40+	0.85	(0.31–2.38)	2.28	(0.92–5.67)
Ethnicity (versus white)				
African-American	**3.61**	(1.11–11.69)	†	
Hispanic	**2.66**	(1.11–6.34)	†	
Other	1.99	(0.58–6.78)	†	
Income (versus < $25 000)				
>$25 000	**2.48**	(1.12–5.47)	†	
Severity measures				
AA attendance at T2	0.18	(0.03–1.04)	†	
Dependence Score	†		**0.81**	(0.74–0.88)
ASI psychiatric score	†		**0.02**	(0.00–0.07)
Reasons for drinking less				
Hit rock bottom	**4.35**	(1.12–16.85)	**1.92**	(1.06–3.49)
Traumatic event	**2.66**	(1.00–7.07)	**2.16**	(1.19–3.92)
Weigh pros and cons	**0.44**	**(0.22–0.91)**	**0.40**	(0.22–0.72)
Saw someone else drunk or high	†		0.63	(0.36–1.11)
Doctor warning	†		**0.50**	(0.28–0.89)
Spouse/partner warning	**0.17**	(0.05–0.58)	†	
Spiritual/religious experience	**2.94**	(1.05–8.23)	**2.36**	(1.36–4.08)

Matzger, H., L. A. Kaskutas, et al. (2005). Reasons for drinking less and their relationship to sustained remission from problem drinking. Addiction 100 (11): 1637-46.

1 year reasons to quit as predictors of 5 year abstinence

Predicted Relapse	Predicted Abstinence
Doctor	Hit Rock Bottom
Spouse	Traumatic event
Weigh Pros and Cons	Transformation

Matzger, H., L. A. Kaskutas, et al. (2005). Reasons for drinking less and their relationship to sustained remission from problem drinking. Addiction 100 (11): 1637-46.

REACTANCE THEORY (Brehm & Brehm)

Psychological reactance is “the motivational state that is hypothesized to occur when a freedom is eliminated or threatened with elimination”

FOUR ELEMENTS OF REACTANCE

- Freedom
- Threat to freedom
- Reactance
- Restoration of freedom

Restoration

DIRECT RESTORATION

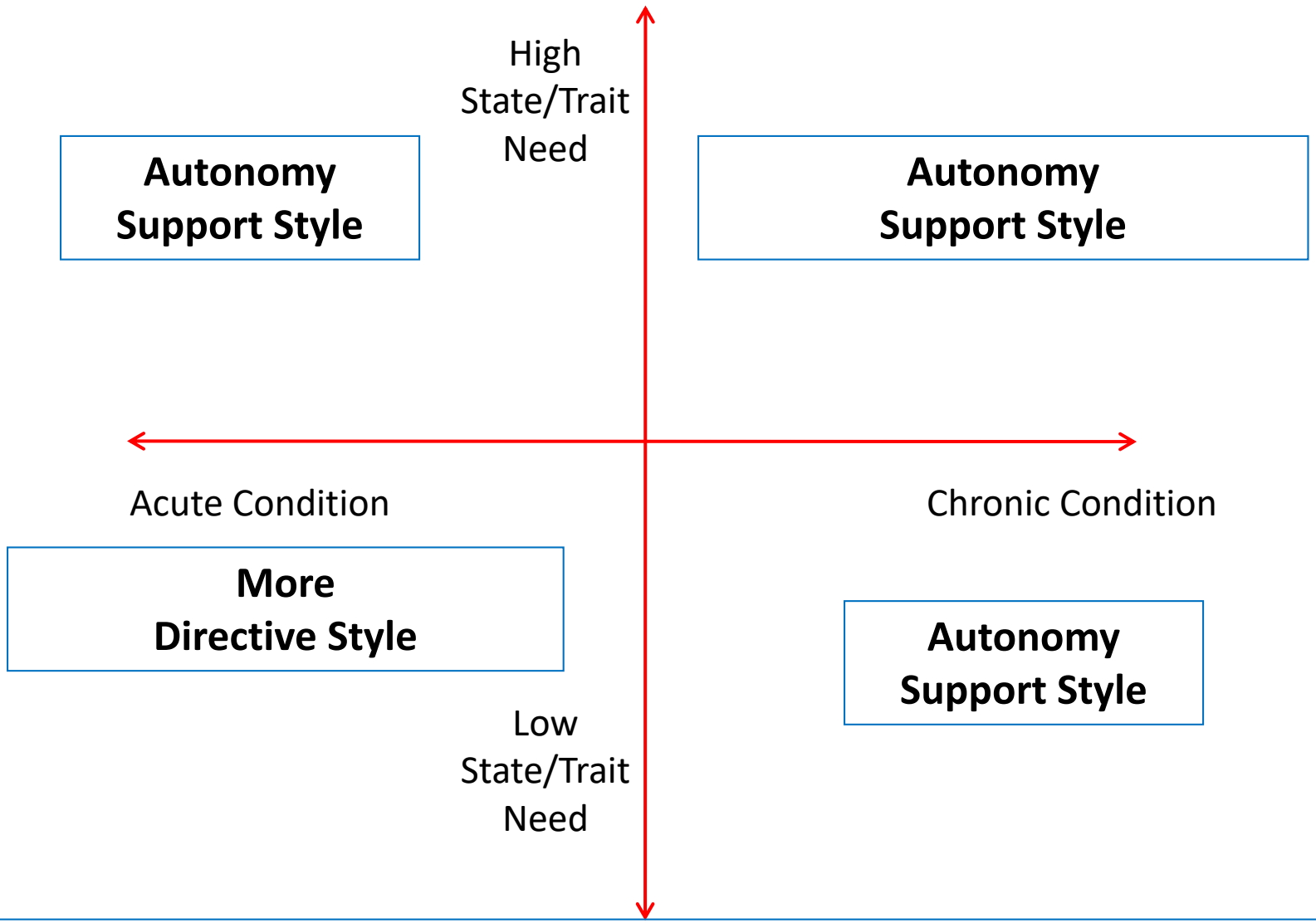
- doing the forbidden act
  - "acting out" behavior

INDIRECT RESTORATION

- counter-arguing, minimizing (ATTACK THE MESSAGE)
- derogating the source of threat (ATTACK THE SOURCE)

- increasing liking for the threatened choice (boomerang attitudes)
- denying the existence of the threat
- exercising a different freedom to gain feeling of control and choice

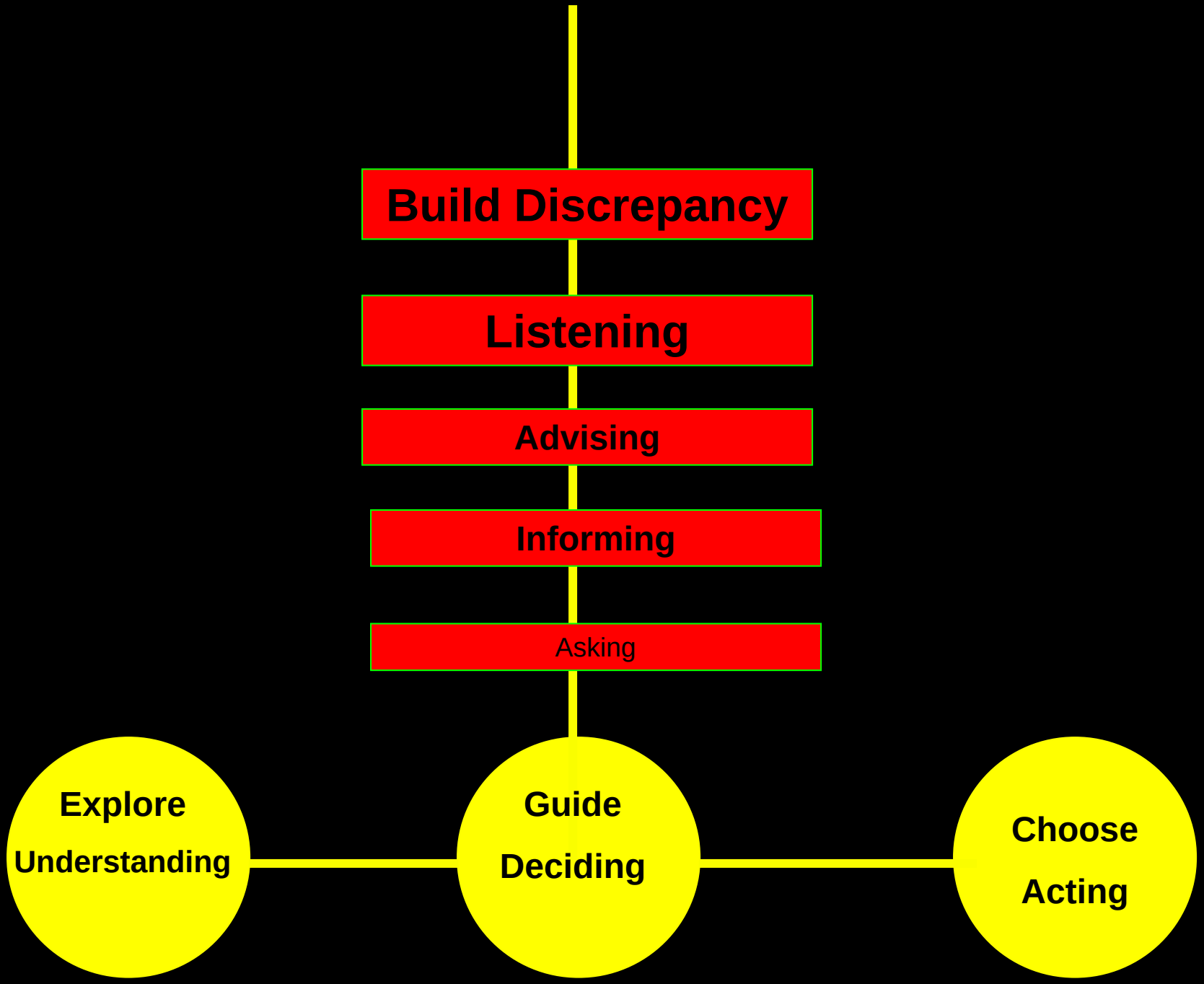
The role of AUTONOMY in patient counseling



Low State need, e.g., high arousal, anxiety or fear state or recent diagnosis
Low Trait need, e.g., preference for expert recommendation, personality-culture

Push vs. Pull

Push (controlling)	Pull (autonomous)
It's important that you…	In what ways is this important?
You have to change xxx…	Changing xxx might help you feel…..
You need to change	Whether or not you change is up to you…….
We have the answer	You have the answer
Here is why you should change	Let us help you find
You should because	Why might you consider?
Here's how to change	How might you possibly go about it?
This will solve your problem	This might help you…it has helped others… Although different things work for people
You Better/You Must	


Build Discrepancy
Listening
Advising
Informing
Asking
Explore
Understanding
Guide
Deciding
Choose
Acting
WHY
HOW

Three Phases of Consultation

- **Explore (WHAT/WHY/WHY NOT)**
  - **COMFORT THE AFFLICTED**
  - Build Initial rapport & Express Empathy
  - Drain the swamp of negativity
  - Obtain a history
  - Collaborative agenda setting
  - Explore pros, cons, hopes and fears (***Reasons***)

- **Guide (IF)**
  - **AFFLICT THE COMFORTBLE**
  - Build Motivation & Discrepancy
  - Elicit change talk
    - 0-10 Readiness Rulers
      - Importance (***Reasons/Desire/Need***)
      - Confidence (***Ability***)
    - Values Clarification (***Desire & Need***)
    - Strengths (Ability)
  - Do Summary with Sandwich
  - SPIN THE BALLS
    - Where does that leave you?
  - *Obtain COMMITMENT*
  - Move toward a behavior decision

- **Choose (if a decision/commitment has been made) (WHEN/HOW)**
  - *Taking STEPS*
  - Establish a Goal
  - Provide Menu of Options
  - Set an Action Plan
  - Overcome/anticipate barriers
  - Make a contract & Discuss follow up

WHY

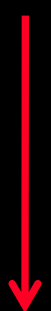
WHY

HOW

Phase I: Explore

- **COMFORT THE AFFLICTED**

- Drain the swamp of negativity
- Build Initial rapport & Express Empathy
- Obtain a history
  - How much, how often
  - Previous attempts
- Collaborative agenda setting
- Explore pros, cons, hopes and fears (***Reasons***)



- **Guiding (IF)**

Agenda Setting

- With Parent Screener…

- ***Paramatized Choice (BMI > 95th)***: In our remaining time today, I was wondering if we could talk about your daughter's weight. I can see from your survey that your family is doing real well with screen time and family meals….however, I see that Keisha is drinking 2-3 glasses of soda a day and you don't feel she is getting enough exercise…which of these, might we want to talk about..

Agenda Setting

- ***Full Choice (BMI < 95th)***: In our remaining time today I was wondering if we could spend a few minutes talking about ways to keep your daughter healthy…..we could talk about her weight, including her diet or exercise, or home and car safety like your hot water heater, car seats…what are you thoughts?

- ***Paramatized Choice (BMI > 95th)***: In our remaining time today, I was wondering if we could talk about your daughter's weight. This might include talking about what she eats, her exercise, or her screen time……what are you thoughts?

Agenda Setting

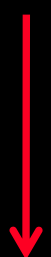
- Today, in our remaining few minutes, there are several things we might want to discuss. It could be your smoking, blood pressure, your weight, or whatever else you might find of use. What do you think is the best use of our time ?

Old School	New School
I see that your total cholesterol levels are higher than we would like. We really have to talk getting your cholesterol down. Let's start with your medication. How's that going?	I see that your total cholesterol is 360. What are your thoughts about that? Would you say that is higher, lower, or about what you expected? There are several things that can impact your cholesterol levels including what you eat, your exercise, your weight, and medication. Which of these, if any, do you think might be influencing your blood values? Which of these, if any, would be a good place to start? Which of these, if any, is the best use of our time today?
I see that your total A1c is high. We should talk about getting your A1c down. Let's start with your medication. How's that going?	I see that your A1c level was 9.2. What are your thoughts about that? Would you say that is higher, lower, or about what you expected? There are several things that can impact your A1c levels including what you eat, your exercise, your weight, and medication. Which of these, if any, do you think might be influencing your blood values? Which of these, if any, would be a good place to start? Which of these, if any, is the best use of our time today?
I understand that you have been referred due to a drinking problem. We should talk about getting you into AA. That's what you need.	Tell me a little about how you get referred to our program. (patient admits to having a drinking problem and indicates they want to take action, though did not use the word alcoholic or addicted). There are many options for addressing problem drinking. For some people it involves reducing their drinking on their own, others join groups such as AA, some see counselors, while others enter in-patient treatment . Which of these, if any, might be worth talking about?
Need to Stop it (addiction etc).	For some its abstaining, for others it's moderation or controlled use

Phase II: Guide

- **AFFLICT THE COMFORTBLE**

- Build Motivation & Discrepancy
- Elicit change talk
  - 0-10 Readiness Rulers
    - Importance (***Reasons/Desire/Need***)
    - Confidence (***Ability***)
  - Values Clarification (***Desire & Need***)
  - Strengths (Ability)
- SPIN THE BALLS
  - Where does that leave you?
  - What small change might you be willing to make?
- *Obtain COMMITMENT*
- Move toward a behavior decision



- **CHOOSE (if a decision/commitment has been made)**

Open ended ?s

- Can’t be answered yes/no
- Cast a broad net
- Use respondent’s own words; Don’t label emotions
- Not biased
- Have few assumptions
- Non-judgmental/"Preachy"
- Ask one question

Open Ended Starters

Open	VS	Closed
To what extent….		Did You..?
How Often..		Will You..?
Why….		Can You..?
Tell me about…..		Is it...?
Help me understand…..		
What, if any,…..		
When, if ever,		
How, if at all,		
What else…..		

Some are like this

Others like this

Where are you?

Decreased Worse

Stayed Same No Change

Increased Better

Effective “generic” Starters

- Typical day
- Compared to…….
- O-10 or 0-100
- How’s it going?
- How’s that been/worked for you?
- How have things been since we last spoke?
- Tell me about days when it has gone well/not so well
- To what extent does this surprise or was this expected…

Assessing Adherence/Persistence

- In the past month, how many doses of XXX have you missed?
- In the past month, on a scale of 0-100, with 0 missing no doses, and 100 misses almost every dose, where would you rate yourself?
- In the past month, thinking about your medication, would you say
  1) You have been taking it less regularly
  2) You have been taking it more regularly
  3) No change. Taking it the same as always.

Nasty Closed Ended

- Have you always been this fat?
- Do you really want to die?
- Do you not care about your kids?
- Haven't you thought about what will happen if you come off the drug?
- Are you aware how bad this is for you and your family?
- Do you sleep around?
- Are you finally ready to quit?
- Do you watch your salt intake carefully?
- Does your child take her insulin everyday as we recommend?
- Do you watch a lot of TV?
- Do you get enough exercise?
- Do you think that African Americans are very distrustful of the health care system?
- Didn't you know that BEFORE you married him!

Sometimes Close-ended is Preferable: WHY?

- Have you ever eaten a kiwi?
- Did you vote in last year's election?
- Is there a TV in your child's room?
- Did you take out the garbage?
- Do you have a driver's license?
- Did you close the garage door?
- Do you have enough pills for your two weeks away?
- Did you bring your consent form with you?
- Do you have your insurance card with you?
- Are you having any thoughts of harming yourself?
- Do you have a plan in any way to harm yourself?

BENIGN Close-Ended ?s

- Are you ok?
- Is this a good time to talk?
- Does that make sense?
- Did things work out with xxxx?
- You feeling any better since we spoke last?
- Are you still have problems with XXXX?
- Did that help at all?
- Were you able to try any of what we talked about?
- You ok with that?
- Are things still difficult at home?
- You alright talking about this?
- Are things any better?
- Can you see how that might affect you?
- Might it be possible?--- Might that work for you?
- Are you concerned at all about that?

Probes

Can follow open or closed-ended question

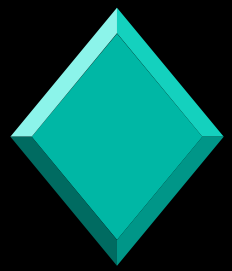
- Examples…
  - In what ways?
  - Why do you say that?
  - Tell me more about that.
  - Why do you feel that way?
  - How did that make you feel?
  - What was that like for you?
  - What were some reasons for your decision?
  - What are your concerns about this?

Reflective Listening

- Statement, not a question
- Ends with a down turn
- Hypothesis testing

  (If I understand you correctly, *it sounds like..*)

- Affirms and validates
- Keeps the client thinking and talking



Reflective Listening: Value added

Information *PLUS* empathy and understanding

How well do you think people understand you?

vs

You're feeling nobody understands you.

Second vs. First Person Praise
Reflect vs. Cheerlead

You	I
You seem proud of what you have accomplished	I am proud of you
You have put a lot of effort into this	I am happy to see you have done this
You have tried really hard to quit	It is great you have tried to quit
You are getting more confident that you can do it	I know you can do it

Happy	Sad	Angry	Confused
alive	awful	agitated	anxious
amused	bad	annoyed	awkward
anxious	blue	bitter	baffled
calm	bummed out	burned up	bewildered
cheerful	crushed	critical	bothered
content	depressed	disgusted	crazy
delighted	desperate	dismayed	dazed
ecstatic	devastated	enraged	disorganized
elated	disappointed	envious	disoriented
energized	dissatisfied	fed up	distracted
excited	distressed	frustrated	disturbed
fantastic	disturbed	furious	embarrassed
fortunate	down	hostile	frustrated
friendly	embarrassed	impatient	helpless
fulfilled	gloomy	irate	hopeless
glad	glum	irritated	jolted
good	hateful	livid	lost
great	hopeless	mad	mixed up
hopeful	hurt	outraged	panicky
lively	lonely	perturbed	paralyzed
loving	lost	put out	perplexed
motherly	low	riled	puzzled
optimistic	miserable	resentful	shocked
overjoyed	painful	seething	stuck
peaceful	sorry	sore	stunned
pleased	terrible	ticked off	surprised

Reflecting 101: Basic Structure

- It sounds like you are feeling……
- It sounds like you are not happy with….
- In other words…….
- So you are saying that you are having trouble……..
- So you are saying that you are conflicted about ……..
- I think you may be saying….
- Correct me if I'm wrong…
- I hear you saying…

As you improve, you can truncate the reflection….

- You're not ready to….
- You're having a problem with ....
- You're feeling that…..
- It's been difficult for you….
- You're struggling with……

Reflection Pronoun Hierarchy

- YOU
- IT’s
- I/we

Health Behavior Change: The Feeling Vocabulary

- Trapped
- Torn
- Hopeless
- Powerless
- Alone
- Overwhelmed
- Drained
- At War/Conflicted
- Struggling

Types of Reflections

▪ Content	SIMPLE
▪ Feeling/Meaning ▪ Double-Sided ▪ Rolling with Resistance ▪ Amplified Negative ▪ Reflection on Omission ▪ Action	COMPLEX

Affirm effort…

- This is important to you
- You have put a lot of effort into this
- You care a lot about this
- This is a priority for you
- You tried hard
- You're invested in this
- You miss/You love

E-P-E

- **E**licit
  - **PERMISSION 1:** Would it be ok if we spend a few minutes talking about XX?
    - ✓ What is your understanding of?
    - ✓ What have you heard about?
  - **REFLECT AND AFFIRM THEIR KNOWLEDGE**
  - **PERMISSION 2:** If it's okay I'd like to share with you some other (or new) information about xx
  - **GIVE CHOICE ABOUT WHAT AND HOW**
    - ✓ What's the most important thing you want to know about?
    - ✓ What do you want to know?

- **P**rovide
  - Information
  - Advice

"Some of what I say may differ from what you have heard?"

- **E**licit
  - What do you make of that?
  - Where does that leave you?
  - How does that compare to what you previously thought/heard?
  - Do you have any other questions about this?
  - What else might you want to know more about?

E-P-E

- **Is this normal ?**
- **Can I xxx?**
- **Correcting Misinformation**
- **Adding Essential Information**

Change Talk

We become more committed to that which we voice

Client Takes the "positive" side of the argument

- Client "discovers" discrepancy between current behavior with core values/goals
- Problem Recognition
- Client states their Pros
- Client solves own barriers
- Explore life without the problem
- How I felt when I used to do it
- How I would feel if I did do it

Change Talk Reflections: Before Change has Started

Starting to feel you want a change xx
Something about xx is starting to feel not right for you
Starting to feel you no longer want xx in your life..
Starting to think it might be time to change…
Starting to feel xx has gotten a little out of control
Starting to catch up with you…
Starting to bother you a bit more…
Starting to worry you a bit more
Moving more toward change…
Wondering what it might be like with/without
Starting to feel a little dependent on xxx (for addictive)
….but you realize that…
Xx does not feel sustainable..

Exception

Fully Motivated Patient
Ok to Reflect with Enthusiasm

Change talk reflections: When things have started

Putting a lot of energy into this
Starting to see the benefits
Putting in a lot of effort
Really trying to make this work

Behavior Change: The Three Options

Substitution

Moderation

Abstinence

Action Reflections

- Imbed Solutions to Barriers
- Imbed Action Plans
- Undersell
- GIVEN WHAT YOU SAID……
  - You might want to…
  - You might want to consider…
  - Sounds like…..might be an option…
  - If we are to move forward you might want to address….

Action Reflections: Soft Sell CBT

- 1) Invert Barrier
  - Sounds like we might want to address barrier a,b,c
- 2) General Behavior Fix
  - Sounds like doing something like x,y,z
- 3) Specific Behavior Fix
  - Sounds like doing x may be a possibility
- 4) Cognitive Fix
  - Sounds like you may have to think about x differently (make peace, no all or nothing thinking, giving credit)

EXTENSION OF REFLECTING ON DARN CA***T (Taking Steps)***

Eliciting Change Talk

Importance and Confidence

Importance

On a scale of 0 to 10, with 10 being very important, how important is it for you to (quit smoking, eat more F & V, exercise more, take your meds)?

0	1	2	3	4	5	6	7	8	9	10
Not at all					Somewhat					Very

Confidence

On a scale of 0 to 10, with 10 being very confident, assuming you decided to ..... (quit smoking, begin exercising) how confident are you that you could succeed ?

0	1	2	3	4	5	6	7	8	9	10
Not at all					Somewhat					Very

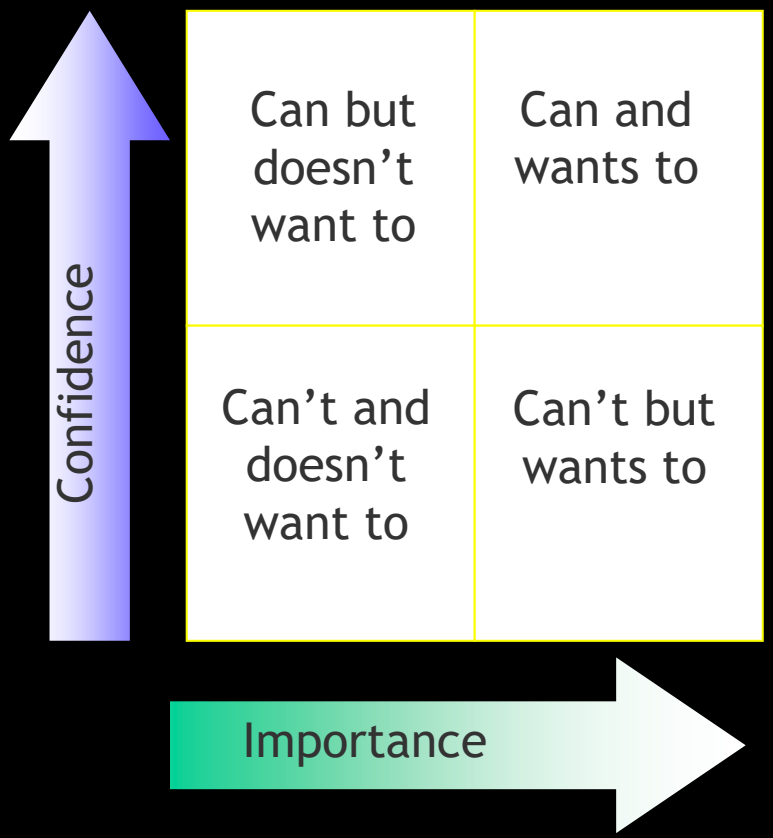
Eliciting Change Talk: "The Three Probes"

1) Could have been Lower

2) Could have been Higher

3) What would it take

Motivational Matrix



Importance

Confidence

Good things and not so good things

Could you tell me some of the things you like (enjoy) about .....
Could you tell me some of the things you don't like about.....
Tell me some of the reasons why you might want to change your.....
Tell me some of the reasons why you may not want to change .... (Fears, Barriers)
Tell me how much you dread making this change.

How might your life be different if you .....
(Stopped smoking, got off drugs, started exercising, lost weight)
What benefits, if any, might there be if you ……
How, if at all, does your (drinking, smoking, weight) impact your family or your job?
What are some of the negative things about continuing your (smoking, drinking, not exercising)?

Roles, Goals, and Values

Which of the Following Values, Traits, or Characteristics are Important to you?

Good Parent
Good Spouse/Partner
Responsible
Strong
On top of things
Competent
Spiritual
Respected at home
Considerate
Successful
Popular (Youth)
Tolerance
Justice
Genuine

Attractive
Disciplined
Environmental Conscious
In Control
Respected at work
Athletic
Not hypocritical
Energetic
Supportive of others
Youthful (Older)
Independent (Older)
Respect for Others
Community/Neighborhood
Authentic

Choose your top 3 or 4

- How might the values you chose, possibly motivate you to make this change?

- If you changed your behavior, how might it influence your values?

Explore linkages

- Current Behavior
- If you Changed the Behavior

If not raised by client…..

- Your Health
- Losing your Health

Two ways to values clarity

- Organic: What values are important to you?
- Directive: Which of these values might be related to this behavior……?

Developing Values Discrepancy: Probes

How, if at all, does your *current* behavior affect your ability to achieve these goals or live out any or all of these values?

How, if at all, would *changing this behavior* affect your ability to achieve these goals or live out any or all of these values?

What connection, if any, do you see between your *health* and any of these values/goals?

How if it all, might *losing your health*, affect your ability to live out any or all of these values and goals?

Values Transition…..

- We have found that behavior change is often easier when it relates to a person's values and goals…so for a few minutes I would like to discuss ….

- When considering behavior change it is often useful for me to get a better understanding of what is important to you as a person…what motivates you….this may help you find motivation (inspiration) for making what can be difficult changes.

- I would like to switch gears for a second and learn a bit about what is important to you….this might be helpful in finding reasons to change….

Values for Adolescents

Good student
Healthy & fit
Strong
Responsible
On top of things
Athletic
Competent
Spiritual
Respected at Home
Successful
Popular
Accepting Diversity
Good at Technology
other_____

Disciplined
Respected at school
In control
Good to my parents
Good Sibling
Attractive
Confident
Energetic
Mature
Independent
Good School Member
Having Good Friends
Accepted

Values for Parents of Overweight Youth

Values For Your Child

- Be Healthy
- Be Strong
- Have many friends
- Being fit
- Not feeling abnormal
- Not being teased
- Not feeling left out
- Be able to communicate his/her feelings
- Fulfill her potential
- Have high self-esteem

Values for You

- Good Parent
- Responsible
- Disciplined
- Good Spouse
- Respected at Home
- On top of things
- Spiritual

Values for Your Family

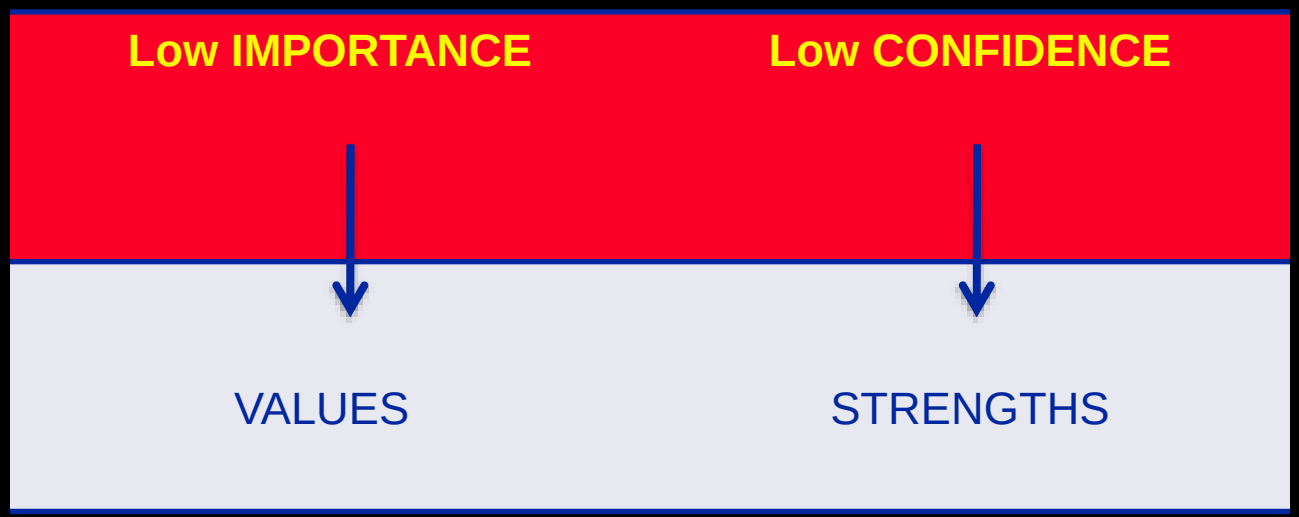
- Cohesive
- Healthy
- Peaceful Meals
- Getting along
- Spending time together

RGV Two Ways

- How do the RGV that you selected possibly influence your motivation to change your target behavior?

- How if you changed your target behavior, might it influence the RGV you selected?

Importance vs. Confidence
Values Vs. Strengths



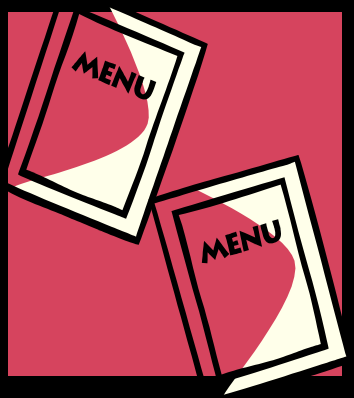
What are you good at ?
(What is something difficult you have achieved?)
(What is something you have overcome?)

- SPORTS
- MUSIC
- ART
- COOKING
- MY JOB
- MATH
- SCIENCE
- LANGUAGES
- WRITING
- DISCIPLINE
- STRONG
- FIXING THINGS
- TRUSTWORTHY
- PARENTING
- BEING CREATIVE
- STAYING POSITIVE
- LEARNING NEW THINGS
- STAYING COOL UNDER PRESSURE
- BEING PATIENT
- HELPING OTHERS
- FORGIVING
- APPRECIATING/BEING THANKFUL
- RESEARCHING THINGS
- LISTENING TO OTHERS
- CARING
- BEING SPONTANEOUS
- BEAT AN ILLNESS
- OTHER_____

Linking Strengths

- Your confidence to do XX is low.
- Think for a minute about some of the other things you are good at, like *sports, being a father, and meeting challenges at work*.
- How might your success in these areas help you find the confidence you need to change XX?

PHASE 3: CHOOSING



1) Build a Menu of Options
   - 1a) List possible ideas mentioned by client during session
   - 1b) Ask patient for other solutions
   - 1c) Offer "other ideas that have worked with people with similar concerns"
2) Ask "which if any of these" might work best for you". If they choose one…
3) Ask "what might you be able to do to increase your chances of success in the next day or week"
4) Summarize (you or them?)
5) Hope assessment

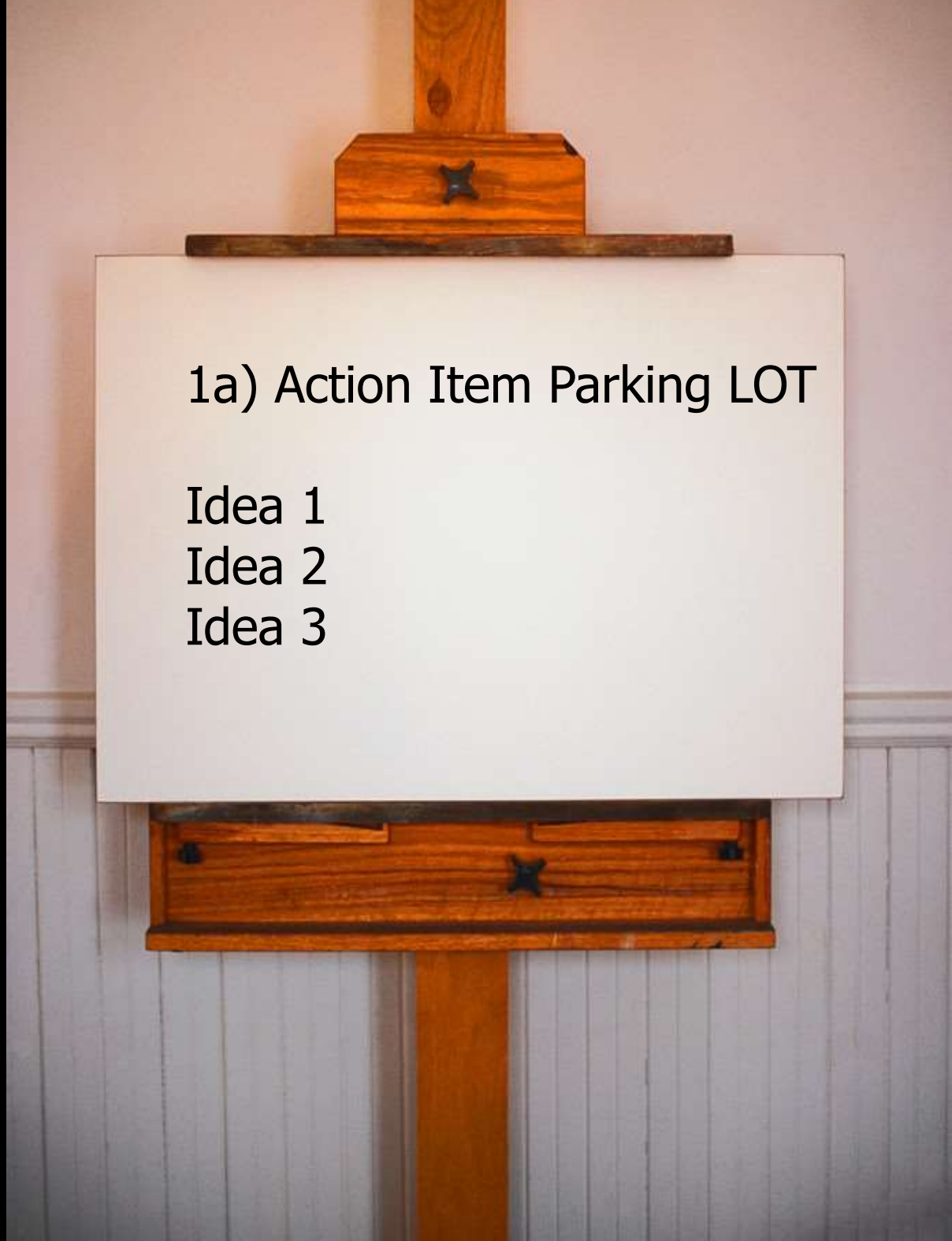
Homing in..

- Of the things you mentioned, which one or two is the best place for us to start?
- Which of those do you think you might be able to change?

Throughout the session, listen for action talk

Often, clients will already have an idea for what they MIGHT try

Make a mental note and mention that you may go back to that idea later



Moving Forward…

- What might you be able to do in the next few days to move things along (or increase your chances of success?)
- What might you be able to do in the next few weeks to move things along?

Behavior Change: The core dialectic

ACT our way into a new way of THINKING

Vs.

THINK our way into a new way of ACTING

Cognitive Behavioral Therapy 101

Behavioral

- Goal Setting
- Self Monitoring and Feedback (Diary)
- Contingency Management (reward)
  - Verbal
  - Tangible ($)
- Environment and Modeling
- Communication
- Substitution, moderation, abstinence

Cognitive

- Restructuring
  - All or nothing
  - Musterbating
  - Worsting
  - Exaggerating negative consequences
  - Giving Credit
- Anticipating Lapse
- Confidence Building

Autonomy Support: You to Parent

- Shared agenda setting
- Do not pressure change
- Provide “escape hatch”
- Choice about
  - What to change
  - How to change
  - How much change
  - When
  - How Monitored
  - Use of Contingencies

Autonomy Support: Parent to Child

YOU PROVIDE THEY DECIDE

- How much to eat
  - Provide “green” and “yellow” foods
- Let them determine seconds & satiety
  - Query “how full are you”
  - Do not encourage, comment, or reward clean plate

Autonomy Support: Parent to Child

YOU PROVIDE THEY DECIDE

- Meal Construction
  - "Chicken or steak" tonight
  - "Pasta or Pizza"
  - "Broccoli or Peas"
- Shopping
  - Brand
  - Which "apple"

Autonomy Support: Parent to Child

YOU PROVIDE THEY DECIDE

- TV/Screen Time
  - You set limit (can be collaborative)
  - They decide when and how to cash in
- Treats/Sweet Drinks/Fast Food
  - You set limit (can be collaborative)
  - They decide when and how to cash in

Involve/Engage

- Cooking
  - Peel
  - Stir
  - Flip
  - Pour
  - Sprinkle
  - Spice
  - Mix
  - Skewer
- Decorate
- Set Table

Options for Change: BMI^2

Cognitive

- Making peace with the transition phase. It may suck initially
- Small changes still count
- Healthy eating is not an ALL or NOTHING game
- Once in a while it's ok
- It might take some time
- Your child will eventually eat it
- You PROVIDE they DECIDE

Behavioral

- Order Salad at Wendy's
- Limit TV to 1 hr a day
- Order apple fries
- Walk with your child
- Talk to your husband about his ice cream
- Have F & V around
- Meditate or take Yoga
- Provide choice

Cognitive Options for Change

- Abstinence violation syndrome/Not All or Nothing
- Craving/discomfort will pass
- Counting small changes
- You can in fact deal with it
- The withdrawal/side effect is normal
- Focusing on the benefits
- Making peace with the fact that the benefit is difficult to observe
- Taking actions gives you a sense of control
- Giving it your best shot

Goal Setting

- Small goals build efficacy, persistence and commitment
- Any change is positive

Rewards

- Do not use food as reward
- Hugs and attention can work as much as monetary rewards
- Where possible, reward effort not only outcome
  - Trying new food
  - Trying exercise
- Tangible rewards time limited

Diary keeping
Self-Monitoring

- Optional Strategy
  - Autonomy support
  - Offered as option during action phase
  - Helpful to quantify if amount unknown
- Parents choose how long to monitor
- Linked to Goal
- Possibly linked to rewards

BMI^2 Diaries

- Beverages (Bi-directional)
- Snack (Bi-directional)

- Dining out
- F & V
- TV
- Activity
- Generic (everything else)

Autonomy Support: You to Parent

- Shared agenda setting
- Do not pressure change
- Provide “escape hatch”
- Choice about
  - What to change
  - How to change
  - How much change
  - When
  - How Monitored
  - Use of Contingencies

Involve/Engage

- Cooking
  - Peel
  - Stir
  - Flip
  - Pour
  - Sprinkle
  - Spice
  - Mix
  - Skewer
- Decorate
- Set Table