

Translating Research To Practice: Examining The External Validity Of School- based Behavior Change Interventions

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**In theory, there is no difference
between theory and practice. In
practice there is.**

Yogi Berra



Introduction


 Little evidence that these intervention strategies are translated into general practice

 Purpose: To examine the extent to which school-based health promotion studies report on issues of external validity

Methods

 **A targeted review:**

 **School-based**

 **Controlled intervention studies that promoted good nutrition, physical activity, or smoking cessation/prevention**

 **12 leading health behavior journals**

 **1996 and 2000**

 **Selected based on circulation, audience and topic**

Coding Protocol

RE-AIM Framework

Reach

 Participation rate

 Exclusion criteria and rate

 Representativeness




Efficacy/Effectiveness

 Behavioral outcome comparisons

 Attrition rate at post-test assessment

Coding Protocol and Definitions



Adoption

-  Participation rate at the district, school and classroom levels
-  Exclusion criteria
-  Representativeness

Implementation

-  Extent to which intervention components were delivered to students

Maintenance

-  Individual level—inclusion of at least a 6-month follow-up after the last intervention contact
-  School level--Intervention continuation after the research study was completed.

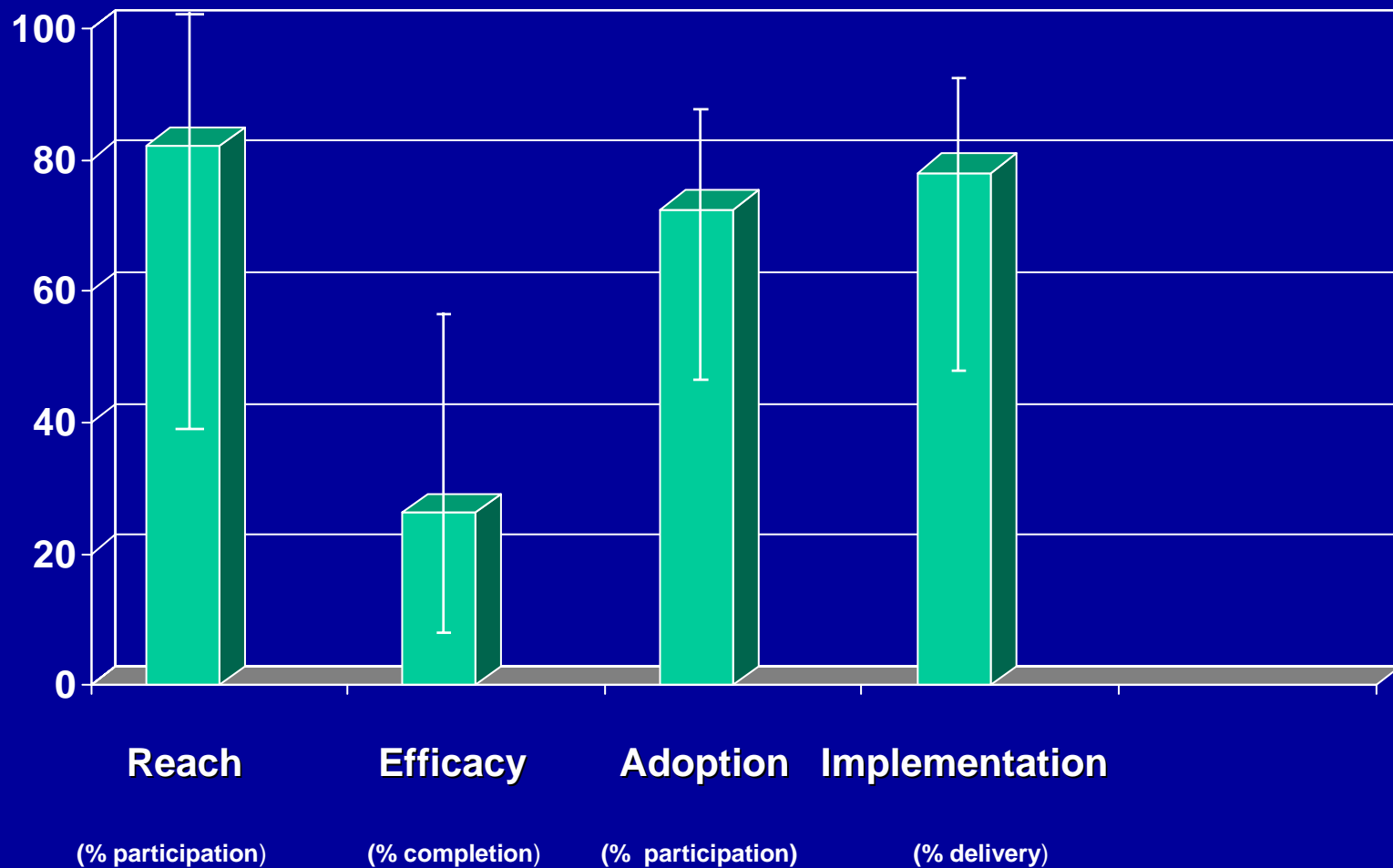
Results

JOURNAL	NUTR	PA	Smoke	Multi	Total
Am J Health Promo	1	0	2	0	3
Am J of Prev Med	0	1	0	0	1
Am J Pub Health	3	1	4	0	8
An of Behav Med	2	1	0	0	3
Health Educ Behav	6	0	0	0	6
Health Educ Q	0	0	1	0	1
Health Educ Res	0	0	1	0	1
J of School Health	2	0	2	0	4
Prev Med	1	0	0	4	5
TOTAL	15	3	10	4	32

Percent of Studies Reporting on RE-AIM Components from Schools– N=27


Component	Percent of Studies Reporting
REACH	
Participation rate	59.3%
Representativeness	7.4%
Investigator exclusion	37%
EFFECTIVENESS	
Behavioral measure	100%
Attrition	74.1%
ADOPTION	
Classroom level	14.8%
School level	14.8%
School Board/District level	7.4
Representativeness-Any level	0
Investigator exclusion	7.4%
IMPLEMENTATION	
Percent Tx delivered on time	37%
MAINTENANCE	
Individual level – 6 month post contact	25.9%
Setting level – continuation after study	0%

Figure. Means and Range of Results from School Studies Reporting on RE-AIM Dimension



Caveats

 **Not intended to be comprehensive**

 **RE-AIM dimensions not reported
does not prove that the
investigators did not collect such
information**


Discussion

- **Generalizability of these interventions to students or schools with varying characteristics is unclear**
- **More likely to report on individual rather than organizational level components of the RE-AIM**

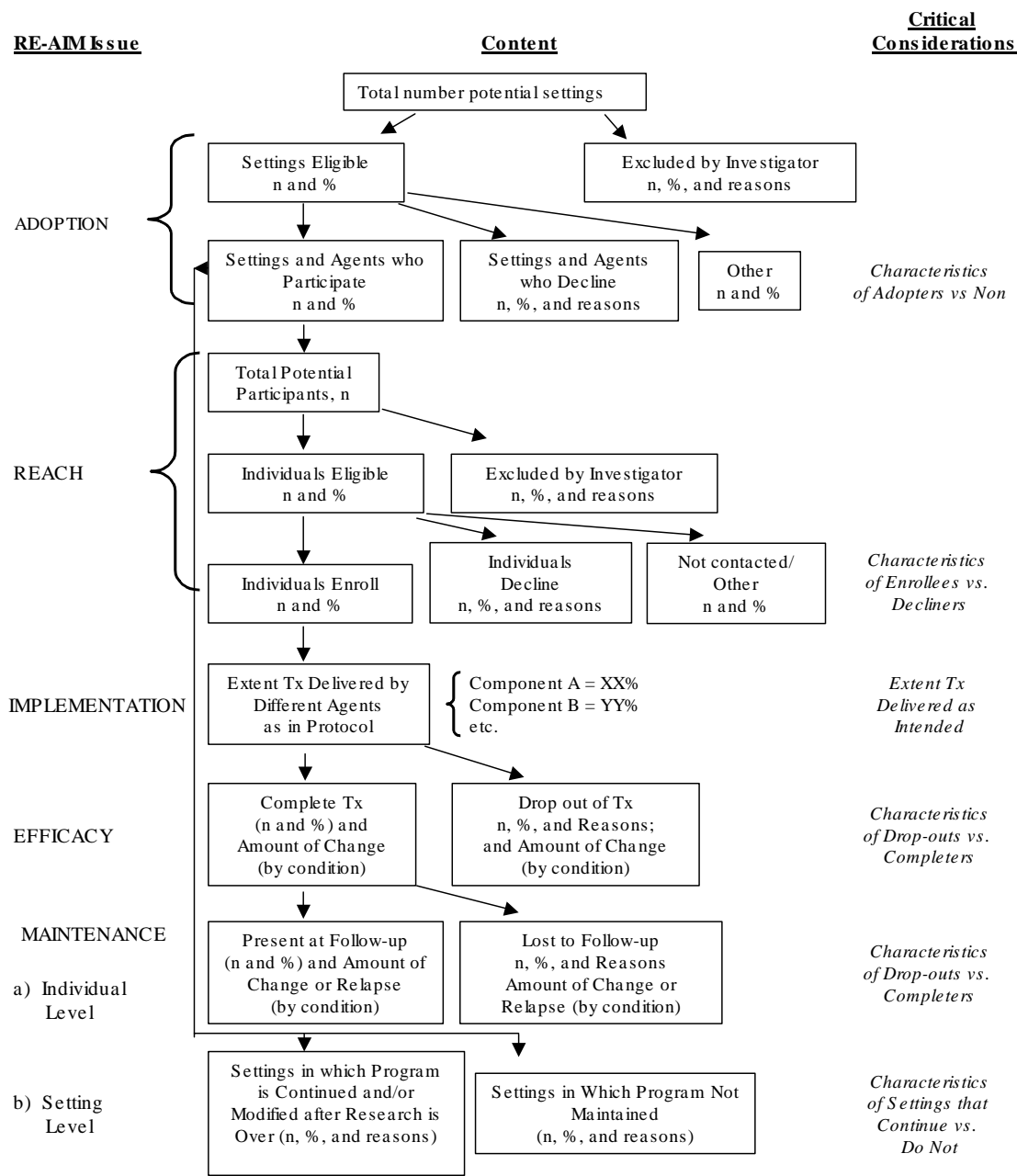
Discussion

 **School-level participation rates are largely unknown**

- **High student participation rates may misrepresent the potential impact of a given intervention**
- **30% of the school boards that they approached declined participation due to a lack of resources**

 **Necessary to establish a standardized reporting system to enhance representativeness and translation**

STANDARD REPORTING ISSUES TO ENHANCE REPRESENTATIVENESS AND TRANSLATION*



*At each step, record qualitative and quantitative information on factors affecting each RE-AIM dimension and step in the flow chart