Applications of Motivational Interviewing as a Core Component of Education-Based Intervention Development and Fidelity

NOVEMBER 8, 2019
Agenda

Introduction

Motivational interviewing- The basics (Blake Skidmore & Andy Frey)

Fidelity of MI in School-based intervention and research (Jason Small & Blake Skidmore)

A motivational interviewing intervention for youth in accelerated high school curricula (Shannon Suldo & Lindsey O’Brennan)

Discussion (Julie Owens)
Significance

MI use in schools increasing

- Consultation and coaching
  - Blom-Hoffman & Rose, 2007; Frey et al., 2013; Lee, Frey, Herman, & Reinke, 2014

- Developing intervention protocols
  - Freira et al., 2018; Frey et al., 2015; Iachini, Rogelberg, Terry, & Lutz, 2016; Reinke, Lewis-Palmer, & Merrell, 2008; Reinke, Herman, & Sprick, 2011; Strait et al., 2012; Terry, Smith, Strait, & McQuillin, 2013; Walker, et al., 2014.

- Supplementing existing interventions to increase engagement and improve implementation fidelity
  - Gueldner & Merrell, 2011; Hebard & Watson, 2017; Herman et al., 2012; Lee, Frey, Herman, & Reinke, 2014; Reinke et al., 2012.

- Training and measurement techniques must be contextualized for school-based applications
Defining MI

Motivational Interviewing is a collaborative, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person’s own reasons for change. Done within an atmosphere of acceptance and compassion.
Defining MI

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In other words...

MI is a strategic way of having a conversation about change. Miller and Rollnick said in some ways the name “Motivational Conversation” would be more fitting.

It can occur in any context, but it is always a collaborative process.

It is a matter of guiding and listening, rather than directing and instructing.

It takes us out of the expert role, and meets them where they are.

How we talk about change influences our behavior!!!
The MI Spirit (relational component)

- Partnership
- Acceptance
- Evocation
- Compassion
MI Processes

Engaging
Focusing
Evoking
Planning
Engaging through Client-Centered Counseling Skills (technical skills)

OARS:
- Open-ended questions
- Affirmations
- Reflections
- Summaries
Mechanisms of MI

MI Training → MI Fidelity → Proximal Outcomes → Distal Outcomes

- MI Skills in Training
- MI Competency
- MI Proficiency
- Technical Component
- MI Inconsistent Behavior
- Relational Component

- MI Fidelity
- Talk about Change
- Change Talk
- Sustain Talk
- Proportion of Change Talk & Sustain Talk (with Resolution)

Line indicates some empirical evidence to support theory
No Line indicates theoretical relationship only
Motivational Interviewing Training and Assessment System (MITAS)

- MITAS Workshop Series (Three 6-hour days)
  - Baseline Assessment
  - Post Training Assessment
- Contrived Pair Practice (n=3)
  - Audio Recorded, then coded for Performance Feedback
- Authentic Practice (n=3)
  - Post Training Assessment
  - Audio Recorded, then coded for Performance Feedback
- MI Refresher Training
Fidelity of Motivational Interviewing in School-based Intervention and Research

Jason Small, Oregon Research Institute
Blake Skidmore, University of Louisville
Andy Frey, University of Louisville
Jon Lee, Northern Arizona University

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Intervention Fidelity

- The extent to which practitioners deliver evidence-based programs and practices as intended (Sanetti & Kratochwill, 2009)

- We know that interventions need to be delivered “accurately, comprehensively, and consistently” to yield positive outcomes (Forman et al., 2013)

- In research settings, fidelity is often not examined at all or only adherence is considered

- In real-world settings, practitioners are even less likely to monitor fidelity (Cook, Lyon, Locke, Waltz, & Powell, 2019)

- Distinguish between adaptation and drift (Sanetti & Kratochwill, 2009)
MI fidelity in school-based settings

• Examination and reporting of MI fidelity has been inconsistent;

• Reviewed 37 MI studies published between 2003 and 2019:
  • 57% did not report any information on the extent to which practitioners delivered MI with fidelity
  • 19% collected data using (a) self-reported adherence measures, (b) a measure without evidence of reliability or validity, or (c) or made only vague reference to monitoring fidelity
  • Only 24% reported examining MI fidelity using a measure with evidence of reliability and validity
Studies examining MI fidelity (n = 9)

- Targeted substance use, obesity, physical activity, or MI training models
- Variation in the collection and reporting of MI quality:
  - Used either the MITI (n = 8) or MISC (n = 1) to assess MI quality
  - Only 4 studies reported fidelity data for all MITI and MISC summary scores
  - Only three studies reported ICCs for inter-rater reliability
  - One consistent finding: Most studies (n = 8) reported and discussed fidelity data at the group rather than the individual level
  - One study reported practitioner-level data and one acknowledged the presence of “variation across interventionists” (Barnett et al, 2012)
Sources of variability in MI fidelity

Dunn et al. (2016); Hallgren et al. (2018); Imel, Baer, Martino, Ball, & Carroll (2011)
Variability in MI fidelity

- Imel et al. (2011):
  - MI skills were not consistent across clients served
  - Low client motivation at the outset of a session resulted in higher MI fidelity
- Dunn et al. (2016):
  - Higher variability within than between therapists
  - Stability in MI fidelity over time with scores neither significantly improving or worsening over time
- Hallgren et al. (2018):
  - Within-provider variability (57-94%); between-provider variability (3%-26%)
The homeBase Intervention

• homeBase is a process for increasing parent’s intrinsic motivation to adopt and implement evidence-based practices with integrity in the home setting.

• Partnership between parent and coach

• Approximately 3 – 5 visits with the family:
  
  (1) Engagement
  (2) Assess current parenting practices
  (3) Performance feedback
  (4) Consultation, education, and support
  (5) Closure
Participating Families

- 120 families
- 96 families (80%) participated in at least one MI session
- Mean age of 37 years ($SD = 10.4$ years)
- Predominantly female (87%)
- Majority reported race as either African American (52%) or Caucasian (43%)
- 10% reported hold a Bachelor’s degree or higher
- 68% were currently employed
- 34% living below the poverty level based on reported income and h/h size
Participating Coaches

- 17 coaches
- Mean age of 35 years ($SD = 13.5$ years)
- Primarily female (82%)
- 71% reported race as Caucasian; 29% reported race as African American
- 59% had completed a Master’s degree or higher
- Varied exposure to MI prior to training:
  - 24% limited exposure
  - 29% had read about MI
  - 47% had previously attended an MI training
Motivational Interviewing Treatment Integrity Code (MITI; Moyers et al, 2015)

• Coding system to examine the verbal behavior of a practitioner, counselor, or coach delivering MI

• Enables examination of the four MI processes (engaging, focusing, evoking, and planning)

• **Four global scores**: Cultivating change talk (CCT), softening sustain talk (SST), partnership, and empathy

• **Ten behavior counts**: Giving information, Persuade, Persuade with permission, Question, Simple Reflection, Complex Reflection, Affirm, Seeking Collaboration, Emphasizing Autonomy, and Confront
## MITI Scoring and Cutoffs

<table>
<thead>
<tr>
<th>Summary score</th>
<th>Calculation</th>
<th>Competency cutoff</th>
<th>Proficiency cutoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational skills</td>
<td>Mean of Partnership &amp; Empathy</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Technical skills</td>
<td>Mean of CCT &amp; SST</td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Percent complex reflections (%CR)</td>
<td>CR / SR + CR</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Ratio of reflections to questions (R:Q)</td>
<td>Ratio of total reflections (SR + CR) to the number of questions posed during the session</td>
<td>1:1</td>
<td>2:1</td>
</tr>
</tbody>
</table>
MITI Collection and Coding Procedures

- Coaches collected audio recordings of all home visiting sessions covering homeBase steps 1-3
- Independent coders randomly selected 20-minute samples from each tape
- Three coders completed MITI coding
- All coders completed a two-day training
- Participated in on-going group coding until reaching 90% reliability on behavior counts and 100% reliability on global scores
- Dr. Sibley coded 20% of recordings for inter-rater reliability checks
## MITI Inter-rater reliability

<table>
<thead>
<tr>
<th></th>
<th>ICCs for homeBase project (n = 37)</th>
<th>ICCs reported in Moyers et al. (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Globals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivating change talk</td>
<td>.788</td>
<td>.862</td>
</tr>
<tr>
<td>Softening sustain talk</td>
<td>.481</td>
<td>.774</td>
</tr>
<tr>
<td>Partnership</td>
<td>.834</td>
<td>.786</td>
</tr>
<tr>
<td>Empathy</td>
<td>.816</td>
<td>.799</td>
</tr>
<tr>
<td><strong>Summary measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MI Non-Adherent</td>
<td>.948</td>
<td>.741</td>
</tr>
<tr>
<td>Total MI Adherent</td>
<td>.766</td>
<td>.778</td>
</tr>
<tr>
<td>Reflection:Question</td>
<td>.671</td>
<td>.919</td>
</tr>
<tr>
<td>Technical</td>
<td>.818</td>
<td>.844</td>
</tr>
<tr>
<td>Relational</td>
<td>.880</td>
<td>.835</td>
</tr>
<tr>
<td>% Complex Reflection</td>
<td>.649</td>
<td>.534</td>
</tr>
</tbody>
</table>
Technical Skills

- **Group-level:**
  - \( M(SD) = 3.8(0.5) \)
  - 97% of sessions **above competency** cutoffs
  - 63% of sessions **above proficiency** cutoffs

- **Individual-level:**
  - Technical means ranged from 3.5 to 4.3
  - CCT means ranged from 2.7 to 4.5
  - SST means ranged from 3.5 to 4.1
  - % of sessions (within coach) **above competency** cutoffs: 83% to 100%
  - % of sessions (within coach) **above proficiency** cutoffs: 15% to 100%

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<table>
<thead>
<tr>
<th>Mean of CCT &amp; SST</th>
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</thead>
<tbody>
<tr>
<td>Competent: ≥ 3.0</td>
</tr>
<tr>
<td>Proficient: ≥ 4.0</td>
</tr>
</tbody>
</table>
Relational Skills

• **Group-level:**
  - $M(SD) = 3.8(0.8)$
  - 80% of sessions *above competency* cutoffs
  - 62% of sessions *above proficiency* cutoffs

• **Individual-level:**
  - Relational means ranged from 2.7 to 4.6
  - Partnership means ranged from 2.5 to 4.6
  - Empathy means ranged from 2.7 to 4.7
  - % of sessions (within coach) *above competency* cutoffs: 17% to 100%
  - % of sessions (within coach) *above proficiency* cutoffs: 0% to 100%

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Mean of Partnership & Empathy

Competent: $\geq 3.5$
Proficient: $\geq 4.0$
Complex Reflections

• **Group-level:**
  • \( M(SD) = 64.1\%(24.5\%) \)
  • 87% of sessions **above competency** cutoffs
  • 79% of sessions **above proficiency** cutoffs

• **Individual-level:**
  • %CR means ranged from 33% to 80%
  • % of sessions (within coach) **above competency** cutoffs: 33% to 100%
  • % of sessions (within coach) **above proficiency** cutoffs: 0% to 100%

<table>
<thead>
<tr>
<th>CR / SR + CR</th>
<th>Competent: ≥ 40%</th>
<th>Proficient: ≥ 50%</th>
</tr>
</thead>
</table>

CR / SR + CR
Reflections to questions

- **Group-level:**
  - \( M(SD) = 1.94(1.92) \)
  - 60% of sessions **above competency** cutoffs
  - 30% of sessions **above proficiency** cutoffs

- **Individual-level:**
  - Mean reflections to questions ranged from 0.1 to 2.7
  - % of sessions (within coach) **above competency** cutoffs: 0% to 100%
  - % of sessions (within coach) **above proficiency** cutoffs: 0% to 67%

| SR + CR / Q | Competent: ≥ 1.0 | Proficient: ≥ 2.0 |
Proportion of variance explained

<table>
<thead>
<tr>
<th></th>
<th>Proportion of variance explained</th>
<th>ICCs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between-session</td>
<td>Between-family</td>
</tr>
<tr>
<td>Technical global</td>
<td>.612</td>
<td>.044</td>
</tr>
<tr>
<td>Relational global</td>
<td>.567</td>
<td>.109</td>
</tr>
<tr>
<td>Percent complex reflections (%CR)</td>
<td>.834</td>
<td>--</td>
</tr>
<tr>
<td>Reflections-to-questions ratio (R:Q)</td>
<td>.853</td>
<td>.147</td>
</tr>
</tbody>
</table>
Development, Applicability, and Acceptability of a Motivational Interviewing Intervention for Youth in Accelerated High School Curricula

SHANNON SULDO & LINDSEY O’BRENNAN  
UNIVERSITY OF SOUTH FLORIDA

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Supports for High School Students in Accelerated Coursework

Motivation, Assessment, and Planning (MAP) meetings to help at-risk students identify strengths and weaknesses in coping and engagement skills and create an action plan to reach their goals.

Identify students at-risk based on self-reported perceived stress and school satisfaction + grades from school records.

Advancing Coping and Engagement (ACE) curriculum; Universal student, teacher, and parent modules addressing (1) effective coping, (2) school engagement, (3) eustress and problem-solving (strengths, values, and goals).
Motivation, Assessment, and Planning (MAP) Meetings

**Goal of MAP meetings:** Help students reflect and develop healthy coping and engagement skills that are linked to emotional and academic success in AP/IB courses.

**Intended Population:** Students who, at mid-year, have signs of academic or emotional risk in AP/IB and thus may benefit from brief, individualized support to address academic or emotional challenges

- **Academic risk:** GPA < 3.0, grades < C in AP/IB classes; scores < 3 (AP) or 4 (IB) on end-of-course exams
- **Emotional risk:** elevated stress, negative feelings about schooling experiences (low connectedness)

**What the Intervention is NOT:** Long-term therapy; Crisis intervention; Mental health support to address issues beyond the ACE Program targets.
Students identified through the screening process are invited to take part in MAP.

Students fill out a survey packet on their current coping strategies, school engagement, and perceived parenting practices. Coach enters student’s survey data into computerized scoring system to compare their responses to a sample of 2379 AP/IB students across FL.

Students meet individually with a MAP coach for a 1-hour coaching session (MAP Meeting 1).

Coach delivers personalized letter to student, with a reminder of their action plan.

Students are offered a second session to review their progress on their goal and/or work towards a new goal (MAP Meeting 2).
Four MI Processes

- Engaging
- Focusing
- Evoking
- Planning

- Miller & Rollnick, 2013
Engage

“Therapeutic engagement is a prerequisite for everything that follows” – Miller & Rollnick (2013)

MAP Goal: Inquire about Student’s Strengths, Values, and Goals
VIA Classification of Character Strengths

Wisdom and Knowledge
- Creativity
- Curiosity
- Open-mindedness
- Love of learning
- Perspective

Courage
- Authenticity
- Bravery
- Perseverance
- Zest

Humanity
- Kindness
- Love
- Social Intelligence

Justice
- Fairness
- Leadership
- Teamwork

Temperance
- Forgiveness
- Modesty
- Prudence
- Self-Regulation

Transcendence
- Appreciation of Beauty/Excellence
- Gratitude
- Hope
- Humor
- Religiosity
Values Discovery Card Sort

Take a stack of cards. Read through the values listed on each card.

Sort the cards into piles based on: very important, important, or not important.

Pick up the cards in the “very important” and lay them out so you can see them all.

Re-sort to identify 3-4 values that are most important to you.
Help Students Identify their Goals

- Goals for AP/IB classes?
- Goals for stress management and engagement?
- Goals for college?
- Goals for your career?
Example Questions Posed during Engage

- *What are the most important things in your life right now?*
- Review previously identified values and character strengths (identified through Module 12 in ACE Program curriculum)
- *Tell me about what you see yourself doing after high school?*
- *How does being successful in AP/IB classes, both academically and emotionally, align with your goals and values?*
Focus

“It’s no use setting off in a clear destination if the client won’t go with you.” – Miller & Rollnick (2013)

MAP Goal: Discuss relative strengths and weaknesses in coping and connectedness and offer normative feedback.
Strength: Time and Task management

Weakness: Reduced Effort on Schoolwork
Example Questions Posed during Focus

- Elicit student’s own perceptions of these comparisons
  - What do you make of your score that is far from the average AP/IB student?

- Use complex reflections to affirm strengths and develop discrepancy between current status on behaviors and student’s long-term goals, values, and expressed desire for academic and emotional well-being.
  - How is your current use of time and task management likely affecting your performance in class?

- Prioritize target behavior to discuss further.
  - We’ve talked about a lot of different things. Which one seems the most important for your to focus on at the moment?
Evoke

“It is the truth we ourselves speak rather than the treatment we receive that heals us.” – O. Hobart Mowar

MAP Goal: Pose questions that elicit change talk on the factors the student wants to address further
Example Questions Posed during Evoke

- Why is increasing your effort on assignments so important to you?
- What are the 3 best reasons for making a change in your positive thinking?
- What do you suppose the future holds if you are 100% successful in not procrastinating on assignments?
- Use importance ruler to gauge the student’s readiness for making a change in target area: On a scale from 1 to 10, how important is it for you to seek out support from people at school?
Importance Ruler
(Helps elicit change talk)

- **On a scale from 1 (not important) to 10 (very important), how important is it for you to change [target behavior]?**
- **Why are you a [number given] and not a [number-2]?”**
Plan

“Ultimately it is the client who must own and implement the change plan.” – Miller & Rollnick (2013)

MAP Goal: Develop action targeting predictors of success and boosting confidence for change
MAP Student Handouts

### Problem-Solving Process in Action

#### Step 1: Recognize Factors that lead to Ineffective Care

#### Step 2: Determine the Potential Benefits of Addressing these Factors

#### Step 3: Develop Alternatives, Solutions, and Evaluate Possible Benefits

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEED</td>
<td>FEED</td>
<td>FEED</td>
</tr>
</tbody>
</table>

#### Step 4: Select the Best Solution and Try It Out

#### Step 5: Evaluate the Outcome, Learn from Success

### Action Plan (Contingency Plan)

<table>
<thead>
<tr>
<th>Action</th>
<th>Option</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Setting Up OKR (Objectives and Key Results)

- **Objectives**
  - Define clear and measurable goals.
  - Align team efforts towards common objectives.

- **Key Results**
  - Establish specific, measurable outcomes that track progress.
  - Use KPIs (Key Performance Indicators) to monitor performance.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Key Results</th>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Goal: To accomplish success in 10th grade by getting into a good college. My [ACE Program Target(s)]: Step 1 - react to stress by skipping school; get perfect attendance this semester.

Steps | Action: | By (Date):
--- | --- | ---
1. | Take few minutes in the morning for a positive pep talk | Tomorrow
2. | Ride to school with mom | Tomorrow
3. | Use agenda to record deadlines; schedule time to complete all tasks | Next week

Additional Steps: Learn the details of the carpool, and prepare to join it

Weekend

Sticking to My Plan
- Stick this paper in the front of my agenda, use perseverance to stick to my time management plan.
- Tell my mom about my positive mindset goals, ask her to help me keep the morning happy which would be good for her too!

With whom can I share my progress? How and when?
Tell my mom about my plan tonight after my softball game, then give her updates a few times a week about how well I’m sticking to it.

Anticipating Bumps in the Road

<table>
<thead>
<tr>
<th>Potential Barriers*</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes I get into a down mood when I’m in stressful situations that are not caused by me.</td>
<td>Reach out to my mom in when it’s an extra stressful time- she’s a good listener and makes me feel better, and helps me remember my goals.</td>
</tr>
<tr>
<td></td>
<td>Remind myself of other times I have achieved my goals, like when I was brave and chose to go into IB.</td>
</tr>
</tbody>
</table>
## Evaluation of the Acceptability of MAP

<table>
<thead>
<tr>
<th>Participants</th>
<th>Study 1 (S1) 2016-17</th>
<th>Study 2 (S2) 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Schools</td>
<td>2 (1 IB, 1 AP)</td>
<td>8 (3 IB, 5 AP)</td>
</tr>
<tr>
<td>Students</td>
<td>49 (MAP Meeting 1)</td>
<td>121 (MAP Meeting 2)</td>
</tr>
<tr>
<td></td>
<td>42 (MAP Meeting 2)</td>
<td>114 (MAP Meeting 2)</td>
</tr>
<tr>
<td>Coaches</td>
<td>7 (3 Ph.D. level, 4 gradient students)</td>
<td>7 (3 Ph.D. level, 4 gradient students)</td>
</tr>
<tr>
<td>End Users (School Mental Health Staff)</td>
<td>3 (1 school counselor, 2 school psychologists)</td>
<td>12 (5 school counselors, 7 school psychologists)</td>
</tr>
</tbody>
</table>
## Data Sources

<table>
<thead>
<tr>
<th>Informant</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Ratings on acceptability surveys:</td>
<td>Three open-ended questions on acceptability surveys:</td>
</tr>
<tr>
<td></td>
<td>MAP Meeting 1 (11 items; $\alpha=.86$)</td>
<td>Most interesting/useful part of meeting?</td>
</tr>
<tr>
<td></td>
<td>Progress since MAP Meeting 1 (5 items; $\alpha=.70$)</td>
<td>Recommendations for change?</td>
</tr>
<tr>
<td></td>
<td>MAP Meeting 2 (8 items; $\alpha=.86$)</td>
<td>Additional comments?</td>
</tr>
<tr>
<td>Coaches</td>
<td>Ratings on acceptability surveys:</td>
<td>Three open-ended questions on acceptability surveys:</td>
</tr>
<tr>
<td></td>
<td>MAP Meeting 1 (2 items; $\alpha=.82$)</td>
<td>Most interesting/useful part of meeting?</td>
</tr>
<tr>
<td></td>
<td>Progress since MAP Meeting 1 (1 item)</td>
<td>Recommendations for change?</td>
</tr>
<tr>
<td></td>
<td>MAP Meeting 2 (2 items; $\alpha=.89$)</td>
<td>Additional comments?</td>
</tr>
<tr>
<td>End Users (SMH Staff)</td>
<td>Ratings on acceptability surveys:</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td></td>
<td>MAP Meetings 1 and 2 (26 items; $\alpha=.95$)</td>
<td>Overall impressions of MAP Meeting 1?</td>
</tr>
<tr>
<td>Applicability data</td>
<td>Research records: Session duration, fidelity of implementation, MI quality</td>
<td>Overall impressions of MAP Meeting 2?</td>
</tr>
</tbody>
</table>
### Findings: Applicability

<table>
<thead>
<tr>
<th></th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation rate (% of invited students who completed MAP Meeting 1)</td>
<td>38.3%</td>
<td>85.8%</td>
</tr>
<tr>
<td>Retention rate (% of participants who completed MAP Meeting 2)</td>
<td>85.7%</td>
<td>94.2%</td>
</tr>
<tr>
<td>Duration: MAP Meeting 1</td>
<td>58.32 mins (SD = 9.33)</td>
<td>50.84 mins (SD = 10.72)</td>
</tr>
<tr>
<td>Duration: MAP Meeting 2</td>
<td>40.81 mins (SD = 10.99)</td>
<td>34.02 mins (SD = 15.53)</td>
</tr>
<tr>
<td>Fidelity to Protocol: MAP Meeting 1</td>
<td>96% FOI (SD = 2.6%)</td>
<td>95% FOI (SD = 4.3%)</td>
</tr>
<tr>
<td>Fidelity to Protocol: MAP Meeting 2</td>
<td>94% FOI (SD = 5.6%)</td>
<td>95% FOI (SD = 2.7%)</td>
</tr>
</tbody>
</table>
Findings: Acceptability Ratings
(S1 = Study 1; S2 = Study 2)

Ratings of Acceptability of MAP Meetings One and Two

<table>
<thead>
<tr>
<th></th>
<th>Student (S1)</th>
<th>Student (S2)</th>
<th>Coach (S1)</th>
<th>Coach (S2)</th>
<th>SMH Staff (S1)</th>
<th>SMH Staff (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP Meeting 1</td>
<td>4.5</td>
<td>4.0</td>
<td>3.7</td>
<td>3.5</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Progress since MAP Meeting 1</td>
<td>4.0</td>
<td>4.0</td>
<td>3.7</td>
<td>3.5</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>MAP Meeting 2</td>
<td>4.5</td>
<td>4.0</td>
<td>3.7</td>
<td>3.5</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Full MAP Intervention</td>
<td>5.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Note. Response scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher average scores represent higher acceptability. Students and coaches completed acceptability measures after each MAP Meeting 1 and 2. SMH staff completed acceptability ratings after reviewing intervention protocols and audio files from a de-identified case.
Students’ Preferred Aspects:
MAP Meeting 1 (118 sentiments from 112 respondents), and
MAP Meeting 2 (117 sentiments from 107 respondents)

Student Responses (from Study 2) to:
What part of the meeting did you find most interesting or useful?

Note. Numbers in chart reflect % of sentiments (written responses) assigned a given code
Students’ Recommendations for Change:
MAP Meeting 1 (18 ideas from 112 students; 83.3% indicated “nothing”) & MAP Meeting 2 (4 ideas from 107 students; 96.3% indicated “nothing”)

**Student Responses (from Study 2) to:**
*What recommendation(s) for change to the meeting do you have?*

- More discussion of personal life
- Simplify or change graph
- Expand goal setting
- In planning, include example strategies
- Expand acting planning
- Simplify questions (protocol)
- Change modality to group
- Shorten the meeting
- Lengthen the meeting

**Note.** Numbers in chart reflect % of sentiments (written responses) assigned a given code
Students’ Additional Comments:
MAP Meeting 1 (51 sentiments from 112 students; 59.8% indicated “none”) & MAP Meeting 2 (37 sentiments from 107 students; 70.1% indicated “none”)

Student Responses (from Study 2) to: Additional Comments or Suggestions?

Note. Numbers in chart reflect % of sentiments (written responses) assigned a given code
School counselors and school psychologists conveyed that the MAP intervention is a self-contained, usable intervention that is appropriate for providing AP and IB students with brief support.

Without systematic supports, AP and IB students often fly under the radar and experience internalizing symptoms (e.g., anxiety) but the universal nature of ACE and the screening helped to prevent some likely later problems and allow all students a chance to receive early supports.

The focus on the stressors faced by AP and IB students is a necessary curricular emphasis that has been needed for these students.
MAP Meetings 1 and 2 (Themes, cont’d)

MAP Meeting 1:

• SMH staff felt that the MAP meeting was effective due to factors such as student-directed nature of the meeting, the counselor-student relationship, and how positive and productive the meeting was, and the high level of student engagement in the meeting.

• The visual elements of the MAP meeting (action plan, graph, etc.) assisted with the meeting flow and facilitated good discussion in the meeting.

• Although every section of meeting seen as important, planning was especially important and 'powerful' part of the MAP session, due to the perception that an action plan is tangible/concrete, holds students accountable and solidifies the work the student and coach have discussed in the session so far.

MAP Meeting 2:

• The positive relationship between the coach and student was evident in the 2nd meeting.

• The 2nd meeting was useful, some felt because it helped the student gain support from a concerned individual with whom they can celebrate successes; students may have realized the benefit of connecting with another person for assistance.

• The 2nd meeting functioned to hold the students accountable to an adult for reporting actions taken and progress made on the initial plan.

• The problem-solving process was further applied in this 2nd meeting; it gave the student an opportunity to reflect on their goal, see the benefits of following through with a plan of action, and learn to revise plans as needed.

• Students had a chance to practice progress monitoring their own goal attainment; such reflection and critical thinking are necessary for success in AP/IB.
Questions? and Acknowledgments

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- Lindsey O’Brennan: lobrennan@usf.edu

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- Northern Arizona University
  - Jon Lee
- William & Mary
  - Janise Parker
- Texas Tech University
  - Joy Huanhuan Wang
Conclusions, Next Steps, & Future Research

• Proficient use of MI in school-based settings is achievable

• Need more systematic studies of MI fidelity with teachers and students

• Need to examine variation across sessions with respect to MI processes (i.e., engagement, focusing, evoking, and planning) and program recipients

• Need to examine fidelity within the interaction between coach and recipient

• Need MI fidelity systems and procedures that can implemented efficiently and effectively in real-world, school-based settings

• Need MI fidelity systems that (a) establish initial fidelity and (b) enable monitoring across time
The Use of Motivational Interviewing Across Multiple Educational Contexts

JULIE S. OWENS, PH.D.
OHIO UNIVERSITY
CENTER FOR INTERVENTION RESEARCH IN SCHOOLS
Fidelity/Integrity

- Application in many contexts
  - Intervention with youth experiencing stress
  - As an intervention supplement
  - Consultation/coaching with teachers
  - Administrative leadership

- Need to be careful not to water down

- Need to be careful how we talk about it when we train others
  - How will others perceive it, if it is mis-represented
  - Is it as effective if the recipient understands the underlying mechanism?
Mechanisms

Proposed paths of action

• Skills practices leads to competency and proficiency
• Therapist behaviors (e.g., eliciting change talk) leads to client change talk
• Change talk leads to intentions
• Intentions lead to behavior change

Need more studies testing these causal linkages
  ◦ How do we capture longitudinally so that we can make causal statements
  ◦ Are the mechanisms the same across contexts (high achieving youth; teachers)
Measurement

How do we efficiently measure behaviors in each path of action?

Paper submitted: teacher ratings on change rulers were associated with change in classroom management practices two weeks later

What can we learn about measurement from MAP?