

SUPPLEMENTAL MATERIALS

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S1. Abridged Exercise Content

Mindfulness Exercise

MMO and MO Conditions

Participants in the MMO and MO conditions were guided through the exercise listed below, which was presented as both an audio recording and a written transcript for participants to follow along. The exercise was adapted from a prior brief mindfulness-based intervention (Hanley & Garland, 2022).

Let's practice. Listen to the audio recording below. You can also follow along in the transcript. The recording will guide you through a brief exercise designed to aid you in adopting [this instruction was slightly adapted for the MO and MMO conditions below]

- MO group: the observe perspective
- MMO group: multiple perspectives

Transcript: First, find a comfortable seat, resting comfortably but remaining as alert and aware as possible. Bring your attention to the sensations present in your body right now. Is your body tired? Full of energy? Relaxed or tense? It doesn't really matter, just notice whatever is present right now. Take a few moments to notice. Now, notice your state of mind. Is it full of thoughts, or mostly empty of thoughts? Are the thoughts moving fast or are they moving slowly? Notice whatever is present right now.

You may notice your mind getting distracted or wandering into certain thoughts, feelings, or even sensations in the body. If the mind has wandered, that's okay, because that's what minds do, they wander. Just notice and acknowledge where the mind has wandered off to and gently bring the attention back to observing. Sometimes it helps to label thoughts as "thoughts" and sensations as "sensations."

Each time you notice your mind wandering, you are learning to step back. To step back from thoughts and feelings and into the clear, open space of mind. Like clouds drifting, notice thoughts and sensations come out of nowhere, gradually change shape, and then fade into the distance, all on their own. There is no need to hold onto these thoughts or push them away. Just letting them go. Notice that a part of the mind is like those thoughts passing like clouds, but there is a deeper part of the mind that is more like the space in which the clouds pass. Practice sitting in this observing awareness.

Control Exercise

AC Condition

Participants in the AC condition were guided through the exercise listed below, which was presented as both an audio recording and a written transcript for participants to follow along.

Let's practice. Listen to the audio recording below. You can also follow along in the transcript. The recording will guide you through a brief exercise designed to aid you in adopting the normal viewing perspective.

Transcript: We will practice the normal viewing perspective by considering a scenario you have encountered in your own classroom. Think back to a recent challenging misbehavior you encountered. Replay the scene in your head. What happened and what was your response? Think about what you might have been feeling in that moment. How did other students respond and how was the class as a whole impacted by the misbehavior? Consider how your prior experiences, or instincts, maybe kicked in to help you to make a decision and respond in that moment.

While you are adopting this perspective, it can sometimes be helpful to imagine being in another situation elsewhere, other than in this room. Try, for example, imagining you are back in the classroom encountering this scenario. Imagine interacting with the student as if it were happening now.

Practice considering this scene for a few moments as it played out and how you viewed and experienced it.

S2. Student Vignette

The vignette presented to participants included the text below, which participants were instructed to read, as well as two brief video clips, which served as the race prime.

One of your students, John, frequently disengages from class, refusing to follow instructions and to do what he is told. Outside of class, John has been confrontational with peers, getting into several physical altercations. You have tried to remain calm and caring, checking in with John privately and attempting to get in contact with his family, so far to no avail. On this particular day, John is refusing to engage in work and has not responded to your verbal redirections.

Later in the lesson, John mumbles what sounds like a curse word and threat directed at you. You address it by quietly checking in to see if everything is OK and asking him in an even tone to adjust his attitude. He stands up and states that you are the one who needs to adjust your attitude. Watch a portion of the scene play out below¹.

¹ Note the brief video clip was used with permission: ©2022 University of Oregon. Authored by Educational and Community Supports

S3. Post-Test Questions

Qualitative Questions

MMO Condition. After reviewing the vignette, the MMO condition was instructed to consider multiple perspectives. The following text was presented, followed by three open response text boxes for participants to complete.

Perspective 1: See if you can take a few moments to observe whatever thoughts or feelings are arising in your mind right now in reaction to the scenario. As thoughts arise, observe them with curiosity and without overanalyzing, almost as if your thoughts are like clouds, passing by in a clear blue sky.

Notice how thoughts arise and then dissipate, like transient mental events that come and go. Continue to observe the mind from this space for a few moments.

When you're ready, jot down what you noticed in your observation. What are your initial thoughts or interpretations on the student's behavior? A brief phrase or sentence will suffice.

Perspective 2: Now, let's consider an alternative perspective. The strategy works best when you consider an alternative that is completely distinct from your initial perspective.

To best do this, it helps to first focus and center our attention by taking three deep, slow breaths. As you breathe, notice the sensations of inhaling and exhaling. By bringing our attention into the present moment, we are more able to think flexibly and creatively.

Now, try to consider the situation as objectively and clearly as possible, perhaps considering the greater context and environment surrounding the scene. What could be an alternative, plausible interpretation of the behavior depicted in the scene? Again, briefly jot down a sentence or two.

Perspective 3: Now, consider one final, alternative perspective. This should be distinct from your initial two interpretations. Consider a third plausible interpretation of the behavior depicted in the scene. Briefly jot down a sentence or two below.

MO Condition: After reviewing the vignette, the MO condition was instructed to adopt a mindful perspective, which was named the “observe perspective” for the purpose of the exercise and adapted from prior studies of a similar paradigm (Papies et al., 2015). The following text was presented, followed by an open response text box for participants to complete.

As you consider the scenario, practice the observe perspective. What thoughts, feelings, or sensations arise as you consider the scenario? Maybe you notice your mind creating a story around what might be going on in the scenario or maybe you consider similar encounters you have had in the past. You could also find that your body responds in some way to it, for example, by feeling a little agitated. So, at many levels of experience – in

your thoughts, in your emotions, and in your body – you might spontaneously have all kinds of responses to viewing the scenario.

Simply observe all these responses as they arise and dissipate. After observing for a few moments, jot down some of the thoughts or sensations you observed. A sentence or two will suffice.

AC Condition: After reviewing the vignette, the AC condition was instructed to adopt a normal viewing perspective, which was adapted from prior studies of a similar paradigm (Papies et al., 2015). The following text was presented, followed by an open response text box for participants to complete.

As you consider the scenario, practice the normal viewing perspective. Imagine encountering this situation in your own classroom. What would it be like to engage with this student in this case? Simply imagine this scene playing out and how you might normally interact and respond.

For example, you might have some feelings about it or you might have an instinctual reaction on how to handle this based on prior experience and similar encounters. Simply consider the situation as you normally would. Try imagining you are in the classroom, experiencing this in real time. What might it be like to interact with the student in this case? Jot down a sentence or two.

Vignette Questions

After engaging in the above tasks, participants were then asked to respond to the likert scale interpretation and recommendation questions. The interpretation construct consisted of six questions that participants responded to on a 5-point likert scale (1 = not at all, 5 = a great deal). Chronbach's alpha for the construct was .82. The questions were adapted from prior vignette studies of a similar paradigm (Naser et al., 2021; Okonofua et al., 2015) and included: (1) How severe is John's behavior? (2) To what extent is John hindering you from maintaining order in the class? (3) How irritating is John's behavior? (4) To what extent do you think John's behavior is indicative of a pattern? (5) How likely is it that you will be able to build a strong relationship with John? [reverse coded] (6) To what extent do you think John is a danger to other students?

The recommendations construct consisted of two questions that participants responded to on a 5-point likert scale (1 = definitely not, definitely yes = 5). Chronbach's alpha for the construct was .65. Participants were asked to rate the extent to which they would recommend the following methods to correct and intervene on the behaviors (1) Refer John to the office to speak with a dean about his behaviors, (2) Recommend detention to correct the behaviors.

Demographic Questions

After responding to the interpretation and recommendation questions, participants were asked a series of demographic questions. The following demographic questions were presented to participants (see Table 1 for participant characteristics). They were asked to share the grade level they teach, their primary role, additional roles if they had them at their school, their gender identity, their racial/ethnic identity, their number of teachers teaching, the type of school they work in (public, charter, private) and the location of their school (rural, urban, or suburban).

Attention Check Questions

Lastly, participants were asked three attention check questions. Participants were first asked to write down what they guessed was the hypothesis of the study. Participants' responses were reviewed and no participants guessed the full hypothesis, which was to assess whether the exercises impacted how participants responded to the student vignettes given the race of the student. Several participants guessed a partial portion of the hypothesis. Three participants in the MMO group, seven participants in the MO group, and 14 participants in the AC group guessed that the hypothesis had something to do with race and school discipline. For these participants, we also reviewed their responses to the qualitative questions as well as to the other two attention check questions, described below. Across each of the responses, the other manipulation and attention checks were answered correctly, demonstrating that they were engaged. Because they did not guess the full hypothesis, we retained them in the final sample.

Next, participants were asked on a 5-point likert scale how focused they were during the study (1= not at all focused, 5 = completely focused). One participant responded that they were not at all focused. This participant's response was reviewed and because they answered the other manipulation and attention questions correctly, demonstrating that they were paying attention to the content, they were retained in the final sample. Lastly, participants were asked how seriously they took the study on a 6-point likert scale (1=not at all seriously, 6 = extremely seriously). No participants responded with "not at all seriously," and thus were retained in the final sample.

S4. Regression Output

Table 1

Regression results using interpretation composite as the criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>sr</i> ²	<i>sr</i> ² 95% CI [LL, UL]	Fit
(Intercept)	2.36**	[1.76, 2.95]			
MMO Group	-0.33*	[-0.60, -0.06]	.03	[-.02, .08]	
MO Group	-0.06	[-0.32, 0.20]	.00	[-.01, .01]	
Gender: Composite ¹	-0.23	[-0.50, 0.03]	.02	[-.02, .05]	
Race: Composite ¹	0.32	[-0.23, 0.86]	.01	[-.02, .03]	
Race: White	0.37	[-0.08, 0.82]	.01	[-.02, .05]	
Grade: Primary	0.12	[-0.24, 0.47]	.00	[-.01, .02]	
Grade: Secondary	0.46*	[0.11, 0.82]	.04	[-.01, .09]	
Grade: Other	0.45	[-0.02, 0.92]	.02	[-.02, .06]	
Role: General Educator	0.25	[-0.08, 0.57]	.01	[-.02, .04]	
Role: Other	0.16	[-0.25, 0.58]	.00	[-.01, .02]	
<5 Years Experience	-0.16	[-0.45, 0.13]	.01	[-.02, .03]	
>10 Years Experience	-0.28*	[-0.55, -0.01]	.02	[-.02, .06]	
School Size: Small	-0.03	[-0.37, 0.32]	.00	[-.00, .00]	
School Size: Medium	-0.02	[-0.31, 0.28]	.00	[-.00, .00]	
School Size: Very Large	-0.13	[-0.49, 0.23]	.00	[-.01, .02]	
Location: Suburban	0.08	[-0.16, 0.33]	.00	[-.01, .02]	
Location: Rural	0.19	[-0.19, 0.57]	.01	[-.01, .03]	

School Type: Charter	0.64**	[0.22, 1.07]	.05	[-.01, .11]
School Type: Other	0.18	[-0.14, 0.51]	.01	[-.02, .03]

$$R^2 = .262^{**}$$

¹In categories with less than 10 participants, composite variables were created. “Gender: Composite” was composed of male and non-binary/non-conforming participants. “Race: Composite” was composed of participants who identified as Asian or Asian American, Hispanic or Latinx, Native Hawaiian or Pacific Islander, or multiracial. “Role: Composite” (a reference variable in this model output) was composed of ESL and Special Education teachers.

Note. A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights. *sr*² represents the semi-partial correlation squared. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively.

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

Table 2*Regression results using recommendation as the criterion*

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>sr</i> ²	<i>sr</i> ² 95% CI [LL, UL]	Fit
(Intercept)	2.28**	[1.42, 3.14]			
MMO Group	-0.40*	[-0.79, -0.01]	.02	[-.02, .07]	
MO Group	0.12	[-0.26, 0.50]	.00	[-.01, .02]	
Gender: Composite	-0.31	[-0.69, 0.08]	.01	[-.02, .05]	
Race: Composite	0.04	[-0.74, 0.83]	.00	[-.00, .00]	
Race: White	-0.03	[-0.68, 0.62]	.00	[-.00, .00]	
Grade: Primary	-0.07	[-0.57, 0.44]	.00	[-.01, .01]	
Grade: Secondary	0.53*	[0.02, 1.04]	.03	[-.02, .07]	
Grade: Other	0.43	[-0.24, 1.11]	.01	[-.02, .04]	
Role: General Educator	0.40	[-0.06, 0.86]	.02	[-.02, .05]	
Role: Other	0.12	[-0.48, 0.72]	.00	[-.01, .01]	
<5 Years Experience	-0.30	[-0.71, 0.12]	.01	[-.02, .04]	
>10 Years Experience	-0.22	[-0.62, 0.17]	.01	[-.02, .03]	
School Size: Small	-0.16	[-0.66, 0.34]	.00	[-.01, .02]	
School Size: Medium	-0.01	[-0.44, 0.41]	.00	[-.00, .00]	
School Size: Very Large	-0.29	[-0.81, 0.23]	.01	[-.02, .03]	
Location: Suburban	0.26	[-0.09, 0.61]	.01	[-.02, .04]	
Location: Rural	0.13	[-0.42, 0.68]	.00	[-.01, .01]	
School Type: Charter	0.58	[-0.03, 1.19]	.02	[-.02, .06]	

School Type: Other	0.41	[-0.06, 0.87]	.02	[-.02, .05]
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$R^2 = .223^{**}$

¹In categories with less than 10 participants, composite variables were created. “Gender: Composite” was composed of male and non-binary/non-conforming participants. “Race: Composite” was composed of participants who identified as Asian or Asian American, Hispanic or Latinx, Native Hawaiian or Pacific Islander, or multiracial. “Role: Composite” (a reference variable in this model output) was composed of ESL and Special Education teachers.

Note. A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights. sr^2 represents the semi-partial correlation squared. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively.

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

S4. Qualitative Analysis and Findings

Manipulation Check Coding

The qualitative responses were first analyzed as a manipulation check. Specifically, I was interested in assessing whether participants were engaging with the exercise content, which I assessed by examining whether they provided a plausible response to the open ended writing prompts. Participant responses were coded as “0” if participants left the question blank or if their response was not cogent (e.g., they wrote something completely unrelated to the study and the task) or coded as “1” if their response was plausible (e.g., they answered the question asked demonstrating that they read and understood the prompt). Two coders coded the sample independently and their results were compared. A subset of responses (8%) were discussed where there was disagreement between coders and consensus reached. Ultimately, all participants were retained in the final sample after determining that their responses adequately answered the prompts, demonstrating their engagement with the task.

Thematic Coding

After coding the responses as a manipulation check, coding was conducted to explore what themes emerged from the data. Specifically, the responses were coded using thematic coding procedures, moving between first and second level coding (Saldaña, 2015). First level coding consisted of assigning labels to participants' words representing the topics that arose in each response, and second level coding entailed identifying relationships, or themes, among and across codes. Below is a sample segment of the codebook.

Codebook Segment

First Level Codes	Second Level Codes
Teacher feels angry	Teacher emotions
Teacher feels disrespected	
Teacher feels annoyed	
Student is disrespectful	Internal, or dispositional, attributions about the student
Student is immature	
Student is aggressive	
Student doesn't understand the assignment	External, or situational, attributions related to the student
Student is hungry/tired	
Student is having a bad day	
Teacher's lesson isn't sufficiently engaging	External, or situational, attributions related to the teacher
Teacher is disrespectful	
Teacher is calling him out	
Student is being bullied	External, or situation, attributions outside of school
Student is experiencing something difficult at home	
Student experienced a negative encounter prior to class	

Qualitative Findings and Representative Quotes

MMO Condition

Below are several representative quotes for each finding from participants in response to the first, second, and third prompts.

<i>Finding 1: Moving from dispositional to situational</i>		
First Perspective	Second Perspective	Third Perspective
John seems to want control, and disengages when he lacks the agency to do so.	John has a lot on his mind, and something outside of the classroom is causing him to behave in this manner. He doesn't seem to want to participate because perhaps -- in John's worldview -- math isn't something he considers important comparatively.	John doesn't understand the content, and fearing stigmas that come with asking for help, he disregards the subject entirely.
Anger that the student was threatening, and wondering why the student is so defensive over their attitude	The student doesn't understand the work they are being asked to do and are frustrated that they cannot understand, which is why they are acting in this way.	The student has a difficult life at home and believes the assignment and school is unimportant compared with the difficulties they are facing at home.

<i>Finding 2: Moving from emotional reaction to taking the behavior less personally</i>		
First Perspective	Second Perspective	Third Perspective
Initially, I would be furious and feeling extremely disrespected.	He's frustrated, doesn't understand the concept, and lashes out.	He's having personal life issues that are affecting his classroom behavior.
I feel annoyed and offended that he's interrupting my class in such a rude way, but I also feel like this probably stems from deeper problems at home that I'm not aware of.	Something terrible may be happening in his family life -- perhaps someone died, or is very sick or is in trouble with the law. He may have gotten particularly bad news this morning.	He feels like I'm constantly targeting him and don't like him, maybe because I criticize him more than the other students or seem to be watching him particularly closely.
My initial thoughts are of	It could be that this student is	It could be that the student is

anger as I feel disrespected by his behavior. I feel threatened as I know his history of physical aggression, and this is a large student that presents a physical threat of harm.	posturing to avoid looking stupid or to lose credibility in the eyes of his classmates. He may also be dealing with a situation at home that impacts his behavior at school.	simply acting, practicing for a role in a school play.
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MO Condition

Below are several representative quotes for each finding from participants in response to the MO prompt.

Finding 1: Noticing emotional reactions

I could feel my heart racing. I felt a threat from the student and my mind wandered to how I would defend myself

Feeling defensive, feeling like I need to reestablish authority, thinking about how I could be a good teacher and also influence the student to do their work

I noticed feeling threatened by this student. He is a tall male and muttered what sounded like a threat.

Finding 2: Noticing conflictual reactions

I feel vulnerable and insecure as he talks back to me. I feel empathy for the student and want to help him but I am unsure how. I feel tired and upset.

My body tensed up as I was challenged by John. At first, I think that sending him out is the best idea. Then I reconsider as the feelings pass like clouds. I wonder if asking him to sit down is best.

My mind created a story around what might be happening in this student's home life that may be difficult. I observed myself feeling both frustrated but also sympathetic.

AC Condition

Below are several representative quotes for each finding from participants in response to the AC prompt.

Finding 1: Noticing an emotional reaction

It might be somewhat frightening because he is a grown boy and might become violent towards me or other students. The behavior may escalate fast.

I would feel very uncomfortable - I hate confrontation, and I'd be worried about injuring my relationship with John but also about the vibe in the rest of the classroom (like if I weren't strict enough, others would start pushing limits too)

I would feel anxious because he is clearly in a bad mood and that may lead him to lash out. The fact that he stood up shows he's escalating the situation and now all eyes are on us so I have to respond correctly.

Finding 2: Considering disciplinary responses

I would be quite stunned but understand it is my authority and responsibility to discipline this student because other students will learn from his behavior. I would say to him that the way he is behaving is unacceptable and he needs to take a break from the class.

I would be a little nervous to confront the student at this time. He has gotten up from his chair and is showing an aggressive stance. I would try to deescalate the situation by talking softly and not aggressively. I would follow up with the counselor and call home to see if anything is going on there.

It would be a little nerve wracking because you don't want an altercation in the classroom. It would make you want to get him out of the class before things got out of hand and he riled up other students.

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