# Our Minds Matter – A Summary of Findings on Club Benefits for Students across Three Points during the 2021-2022 Academic Year

Jordan A. Booker, Ph.D.

## **Background**

**Our Minds Matter** (OMM; <a href="https://ourmindsmatter.org/">https://ourmindsmatter.org/</a>) is committed to understanding and improving aspects of student adjustment and functioning, while promoting the mental health and broader school environment for students and partnering schools. As part of its mission, OMM aims to promote healthy behaviors and attitudes among students who participate in its programming, with the expectation that both student participants and others at their school will benefit from the ways students are learning to engage in healthy and supportive behaviors.

As part of an effort to evaluate the current areas of strength and ongoing potential for OMM, representatives of Promote Care & Prevent Harm and affiliate research partners are proposing to build on earlier efforts to ask student participants about progress and aspects of personal change during and following their participation with OMM activities. We are proposing to ask students about a broad set of items that are directly related to OMM's mission for improving behaviors and adjustment for students: aspects of **social development**, such as the ways they see themselves being supported by others and having positive connections with others in OMM and at school more broadly; aspects of **character development**, including ways students come to better incorporate perspective-taking, forgiveness, and gratitude in their daily interactions and learn new prosocial skills; aspects of **academic development**, including the ways students see themselves as more motivated and capable to achieve major goals in their classes; and aspects of **personal development**, which reflect broad forms of healthy, daily functioning and mental health for students.

Across the 2021-2022 academic year, we surveyed students currently involved in OMM programs across multiple regions (ex. parts of Virginia, Ohio, and national capital region). Most students were cis-gendered female (77.1%). Students represented all levels of high school, with 8.6% first years; 28.1% sophomores; 36.0% juniors; and 27.3% seniors.

Most students represented a large group of clubs beyond the national capital region, in communities across southern Virginia and Ohio (85.4%), with remaining students representing Fairfax County Public Schools (7.3%) and Washington DC Public Schools (7.3%). While we collected the same information from students in DC Public Schools, this information was not intended to be shared beyond those school stakeholders and is excluded from the scores below.

The largest groups of students identified as White or European American (35.6%), followed by students who identified as Black or African American (20.0%), Hispanic or Latina/Latino (20.0%), Southeast Asian or Pacific Islander (15.0%), Middle Eastern or North African (4.4%), Native American (0.6%), or identified with multiple racial or ethnic categories (2.5%).

We were interested in the number of club meetings or activities students attended, their involvement as a student leader, and their views of positive support from other OMM club members could be important for other areas of adjustment. This was based on the major goals and values of Our Minds Matter. We considered *aggregated and non-identifying* reports from students. That is, we considered average trends, and not trends on a student-by-student basis.

## **Survey Collection**

We invited students currently involved in OMM clubs to complete brief surveys about their experiences across three points of the academic year: late fall 2021 (October); early spring 2022 (January); and mid-spring 2022 (March).

While we initially anticipated that most responses may be from a consistent group of students—and, hence, we could track changes *within* sets of students—surveys saw mostly unique students participating at each point. Hence, we shifted to a focus and looked at *one large group of student responses*, representing these three times over the school year when we collected surveys. We were able to do this, because the same questions were presented to students at each of the time points.

We focused on three different reports of student involvement and thoughts about their OMM clubs.

- Number of Attended OMM Club Activities: We asked students how many OMM club activities they had attended. This was based on a set of category responses (ex. Category 1 = 1-5 activities) rather than a specific number from students. On average, students had completed between 6 and 10 club meetings or activities by the time they were completing surveys.
- Whether Students were Peer Leaders: We asked whether students <u>held a leadership role</u> in their OMM club. About 40% of participating students were student leaders.
- Perceived Social Support from Other Club Members: We asked students four items about how they
  felt supported by others in their OMM clubs. A sample item reads, "OMM Members really try to help
  me."
  - o Students were asked how much they agreed with each statement on a 1 (Very strongly disagree) to 7 (Very strongly agree) scale. We took an average score between these four items.
  - o The average score across all students was 5.17. On average, students were a bit higher than the middle value for these items.

We asked students about a set of outcomes we expected to be tied to their OMM club involvement:

- Academic self-efficacy: students' confidence in handling demanding academic tasks and assignments
  - o Students responded to five items about their confidence in completing school-related challenges. We took the average score across those items.
  - o They responded with how true each statement was for them (1 = Not at all true; 5 = Very true)
  - o Sample item: I'm certain I can figure out how to do the most difficult class work.
- Mindfulness: students' use of mindfulness approaches in managing emotions and challenging situations
  - o Students responded to two items about their uses of mindfulness approaches. We took the average score across those items.
  - o Students were asked how often these approaches in their lives (1 = Almost never; 5 = Almost always)
  - o Sample item: When something upsets me, I try to keep my emotions in balance.
- Compassion: students' kindness and consideration toward others
  - o Students responded to two items about showing care and kindness toward others. We took the average score across those items.
  - o Students were asked how true these statements were for them (1 = Definitely false; 7 = Definitely true)
  - o Sample item: When I hear about someone going through a difficult time, I feel a great deal of compassion for them.
- Gratitude: students' appreciation for the good things and people in their lives
  - o Students responded to three items about their appreciation for the good in their lives. We took the average score across those items.
  - o Students were asked how much they agree with each statement (1 = Strongly disagree; 7 = Strongly agree)
  - o Sample item: If I had to list everything that I felt grateful for, it would be a very long list.

- Life satisfaction: students' positive views on the directions of their lives
  - o Students responded to a single statement about finding satisfaction in their lives
  - o "I like how my life is going."
- **Support-seeking**: students' general openness to reaching out to others for emotional and social support when overwhelmed
  - o Students responded to four statements about their comfort reaching out to others in times of need and stress. We took the average score across those items.
  - o Students were asked how true each statement was for them (1 = Definitely not true; 4 = Definitely true)
  - o Sample item: When solving my own problems other people's advice can be helpful.
- **Basic need satisfaction**: the extent students' OMM club involvement made them feel fulfilled in major goals for 1) *autonomy* (being able to make their own decisions); 2) *competence* (achieving goals they set out to accomplish); and 3) *relatedness* (having positive relationships with others)
  - o Students responded to 12 total items. Four items addressed autonomy. Four items addressed competence. Four items addressed relatedness. We formed three average scores—one for each category of need satisfaction.
  - o Students were asked how true these statements were for them (1 = Definitely not true; 7 = Definitely true)
  - o Sample items: I feel like I can make a lot of input into deciding how the work in my OMM club gets done; I really like the people I am in my OMM club with
- **Recent stresses**: the extent students felt pressure or stress in major areas, including 1) *school stresses*; 2) *home stresses*; 3) *peer pressure*; and 4) worries or *uncertainty about the future* 
  - O Students responded to 12 total items. Three items addressed school stresses. Three items addressed home stresses. Three items addressed peer pressure. Three items addressed worries about future uncertainty. We formed four average scores—one for each category of stress.
  - Students were given a list of items or situations and asked how stressful each was in their lives (1
     Not at all stressful or is irrelevant; 5 = Very stressful)
  - o Sample items: Keeping up with schoolwork; Disagreements between your parents or guardians; Being bothered for not fitting in; Having to make decisions about future work or education
- Resilience: ways students tend to quickly recover from setbacks or challenges in life
  - o Students responded to 3 total items about their tendency to recover from stresses and setbacks. We took the average score across those items.
  - o Students indicated how much they agreed with each statement (1 = Strongly disagree; 5 = Strongly agree)
  - o Sample item: I tend to bounce back quickly after hard times.

## Did students' reports tend to differ, if they were participating at a different point in the school year?

Our first analysis tested whether students differed in any sets of reports given the survey time point (Ex. Whether students reporting in the fall differed from those reporting in the spring). With the exception of resilience (F(2, 134) = 3.92,  $\eta^2 = .06$ , p = .022), there was no evidence of student reports differing in a large and systematic way between time points. Students' early spring 2022 reports of resilience were lower on average than other time points.

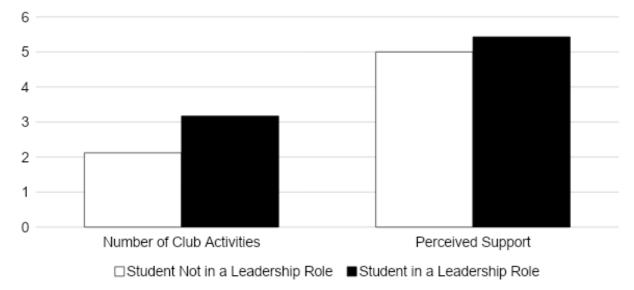
**Table 1**Average Survey Report given Time of Year

<u> </u>	Range of Possible	October 2021	January 2022	March 2022
	Scores	(n = 44)	(n = 97)	(n = 38)
Number of Attended OMM	1 – 8	2.64	2.57	2.85
Club Activities				
OMM Leadership (%)		43%	37%	45%
OMM Club Support	1 - 7	5.15	5.16	5.20
Academic Self-Efficacy	1 - 5	4.11	3.94	4.21
Mindfulness	1 - 5	3.61	3.65	3.63
Compassion	1 - 7	6.31	6.22	6.10
Gratitude	1 - 7	5.69	5.59	5.73
Life Satisfaction	1 - 7	5.00	4.45	4.75
General Support-Seeking	1 - 7	2.83	3.08	3.02
Autonomy	1 - 7	5.21	5.26	5.28
Competence	1 - 7	4.90	4.82	4.85
Relatedness	1 - 7	5.19	5.25	5.26
School Stresses	1 - 5	3.43	3.65	3.70
Home Stresses	1 - 5	3.19	3.17	3.15
Peer Pressures	1 - 5	2.64	2.61	2.43
Future Uncertainty	1 - 5	4.16	3.94	3.94
Resilience	1 - 5	2.93	2.59	3.04

*Note*. The Number of Activities OMM Club Activities reflects categorical values ranging from 1 (1 to 5 activities) to 8 (60+ activities).

#### To what extent were OMM items related?

We tested how each OMM engagement item might be related, expecting that these would be complementary for students. Indeed, we saw support for this. Students who were in leadership roles also tended to attend more OMM activities (Mean Difference in ratings = 1.21; d = 1.79, p = .001) and felt better supported by club members (Mean Difference in ratings = .46, d = .44, p = .007). Figure 1 shows these differences as well.



**Figure 1**. Students' average club activities to-date and average perceived club support, given leadership role within OMM clubs. Student leaders tended to be involved in more club activities relative to peers and tended to report feeling a bit more supported by club members.

Further, there was an overall positive association between the number of attended club activities and perceived OMM club support (r = .26, p = .011). Figure 2 shows a scatterplot between attended OMM activities and perceived support from OMM club members. Because we did not test for change *within* students, we can't point to possible directionality here – whether spending more time in clubs helps drive increases in perceived support, or if students feeling better supported make sure to attend more club activities.

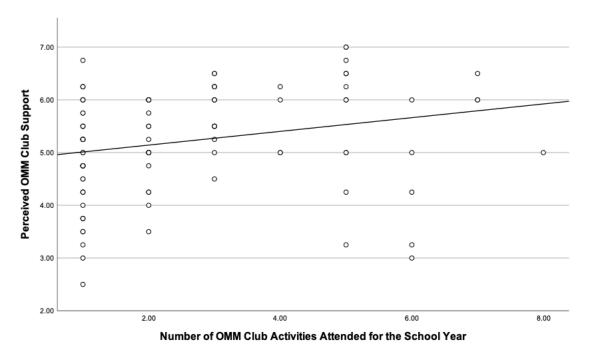


Figure 2. Students reports of attended club activities and perceived OMM club support.

Were items about OMM club involvement linked to other areas of students' mental health and adjustment?

We then tested the ways these three OMM club items could be associated with other reports of adjustment and functioning for students. We tested a series of *correlations* for these analyses. The scores provided range between -1 and +1 and a score closer to an absolute value of one indicates a stronger association between two variables (those closer to zero indicate a weaker association). Positive values suggest that as one item has a higher score, the other item tends to have a higher score (ex. Children's age and height are usually positively correlated). Negative values suggest that as one item has a higher score, the other item tends to have a lower score (ex. Children's age and the number of spelling errors children make are usually negatively correlated).

Historically, there are a few ways of thinking about what correlations are showing us.

- There is the **direction** of the association: positive or negative.
- There is the **confidence** we have that the correlation is not actually a fluke, and we wouldn't likely see zeros if we ran the same tests with other groups of people (this is in essence what we use *p*-values to indicate—what is the chance our findings are flukes).
- We can also think of the strength of the association between items, or what is called an effect size.
   Correlations are convenient in that they already depict effect sizes, and we would not need additional analyses for this information.
  - o Historically, we have used the cutoffs of r = |.10| for small correlations, r = |.30| for medium correlations, and r = |.50| for large correlations.
  - o This is a separate question to our overall confidence in correlations, since things like how many people we are studying influences our confidence in scores from tests. We can have more confidence in a smaller effect if we have more people, and we could fail to have as much confidence in a large effect if we have too few people.

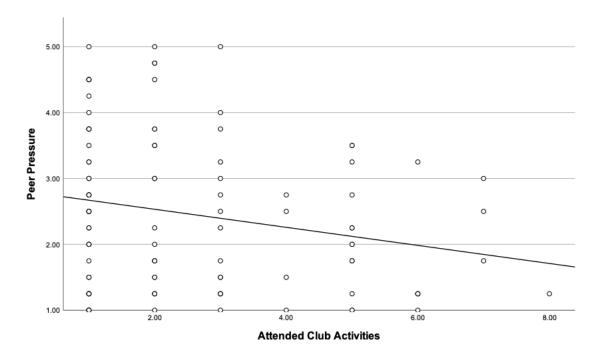
**Table 3**Correlations between OMM Club Items and Students' Reports of Adjustment

	Number of Attended	Taking on a Leadership	Perceived. OMM Club
	OMM Club Activities	Role in OMM Clubs	Support
Academic Self-Efficacy	.27	.21	.04
Mindfulness	.09	.00	.02
Compassion	.29	.11	.33
Gratitude	.33	.14	.25
Life Satisfaction	.37	.22	.32
Support-Seeking	.18	.15	.35
Autonomy	.24	.36	.67
Competence	.16	.18	.72
Relatedness	.17	.17	.71
School Stresses	14	03	.11
Home Stresses	22	.11	.09
Peer Pressures	24	01	.03
Future Uncertainty	21	11	.01
Resilience	.26	.11	.10

*Note*. Positive scores suggest that as one measure has a higher value, the other measure tends to have a higher value. Negative scores suggest that as one measure has a higher value, the other measure tends to have a lower value. Bold values suggest there is enough evidence that our findings are unlikely to be a fluke and to be a zero instead. We tend to label correlations as small if they are |.10| to |.29|, medium if they are |.30| to |.49|, and large if they are |.50| or larger.

## Each OMM involvement item showed associations with multiple items for students.

- 1. Students who attended more club activities reported *greater adjustment* and *compassion toward others*, as well as better *management of stresses* at home and with friends (see Figure 3 for an example with peer pressure).
- 2. Leadership in clubs was tied to *schoolwork confidence* and feeling fulfilled with *fundamental psychological needs* (see Figure 4 for an example with academic self-efficacy).
- 3. Feeling better supported was strongly tied to *greater well-being* and fundamental *need fulfillment* (see Figure 5 for an example with autonomy).



**Figure 3**. Number of attended club activities and peer pressure.

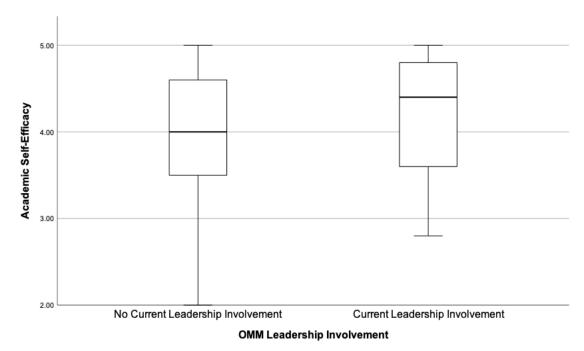
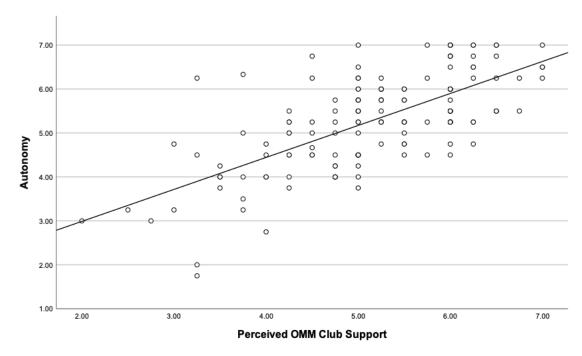


Figure 4. Students' involvement in leadership roles and academic self-efficacy.



**Figure 5**. Perceived OMM club support and autonomy need fulfillment.

## Limitations and Strengths

We are encouraged by many of the current findings, but recognize there are limitations in this work given the design of our approach and collected responses. Our recruitment approaches were limited in a few ways. We struggled to recruit as widely as we hoped, particularly from some partner clubs in regions like the national capital region. We are hoping to continue organizing steps for advertising and making contact with parents and student club members, to better share the purpose of this work and gain families' comfort and motivation for students to contribute. We hope to also continue working with school partners to ease access for students interested in contributing. There can be some barriers as different OMM clubs begin their activities at different points in the year (ex. Starting in the spring rather than the fall), but we hope to continue meeting groups as they are starting activities and making it smoother for interested students to contribute their insights. Further, we were not able to consider change within students, as we tended to have different sets of students providing information from one point in the school year to the next. We hope to find ways to appeal to students to provide multiple reports over time, so we have a clearer sense of change for students and can clarify how OMM club items might help us anticipate improvements in students' lives. We will consider ways we can better maintain contact and outreach attempts with students and try to provide simpler routes to participating for those interested.

We also recognize that there may be additional questions about the specific kinds of activities students contributed to in their clubs (ex. Working toward school wide initiatives to promote helpful behaviors and uplifting activities for peers; learning how to navigate stresses at school or home) and that these different activities might be relevant for different areas of adjustment and functioning. We are reconsidering new items that may be worth adding to this survey, while trying to balance the needs to minimize time and energy burdens on participating students.

Lastly, we were encouraged by areas of success in this project. We found that responding students represented the broader membership of OMM clubs, particularly in representing a rich range of racial and ethnic backgrounds, multiple geographic regions, and multiple academic levels. It is also valuable to collect information about both areas of resilience and thriving, as well as recognition of relevant challenges for students. We hope that this information is relevant for a set of stakeholders, including students and families, OMM club organizers and advisors, and school administrators who are continually looking to anticipate student needs and areas of promise.

# **Brief Summary of Early Findings**

- Overall, students' involvement with OMM clubs seems to be positive for students in its own right
  - o For example, when students feel better supported by other club members, they tend to report greater academic and personal adjustment in their lives
  - Given the growing presence of OMM clubs with more school partners and representing more geographic regions, this is encouraging for having meaningful impacts on teenagers' mental health during (common, yet) challenging periods of high school
- Multiple measures of students' involvement in clubs point to positive benefits for multiple areas of adjustment and mental health
  - o The ways clubs are building positive community and engagement among students is widely successful and should continue being incorporated
- Further, there is early evidence that one of the major aims for Our Minds Matter, promoting students' comfort reaching out for mental health concerns, is positively shaped by students' involvement in clubs
  - o More work is needed to show that students are *increasing* in support-seeking as they spend more time in clubs
  - o Still, programming that focuses on making support-seeking normal (more comfortable to depend on) and gives students more strategies for turning to trusted others for help could be especially beneficial
- There was not evidence that other pushes for improving approaches like mindfulness were showing major impacts at this point still, this could be due to missing data from more students in clubs focusing heavily on mindfulness or signs that revisions to some of the activities centered on mindfulness might be beneficial for students
  - o As club organizers continue to think on revisions to programming and determining current strengths and areas for improvement, it will be worth brainstorming on some of the specific elements of activities geared toward self-reflection and coping, to see what specific steps and activities might be most promising for students