COLLABORATIVE PARTNERSHIP PRE READ FOR BOARD OF DIRECTORS FULL RESEARCH VERSION

Outcomes for mental health services provided to Making Waves Academy during the 2019/2020 & 2020/2021 Academic Years

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FPA BACKGROUND

- Full service psychological, consultation, and research corporation
- Founded and established in 2003 by Dr. Shawn L. Frugé and Dr. Alexis N. Green-Frugé
- Products and services are customized and informed by scientific research, and ongoing independent investigation of inner-city youth
- Primary goal is to help students, educators, and organizations realize their fullest potential
- Nationally accredited doctoral training program for persons who desire to work effectively with urban youth in school settings

RATIONALE & MWA SERVICE HISTORY

- Approximately 30% to 50% of WMs meet criteria for a psychiatric illness outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) at some point during academic career
- Ongoing exposure to violence, physical and sexual abuse, drug related crimes, gang activity, poverty, dysfunctional family relations, and migration dynamics precipitate development of mental impairments
- History of the "Iron Triangle" suggests dearth of effective psychological services to mitigate psychological illness

COMPLEXITY OF STUDENT CHALLENGES

"Although students may receive clinical services to address psychological problems, they continue to be exposed to trauma while undergoing treatment. Certain trauma are fixed and continuous until students matriculate to college. This creates a need for periodic treatment encounters throughout their MW program careers in order to prevent a complete loss of capacity to compete in rigorous academic settings. Early psychological intervention is a buffer of protection for long-term academic success and healthy social adjustment." (FPA Research Archives, 2004, 2005 to 2019)

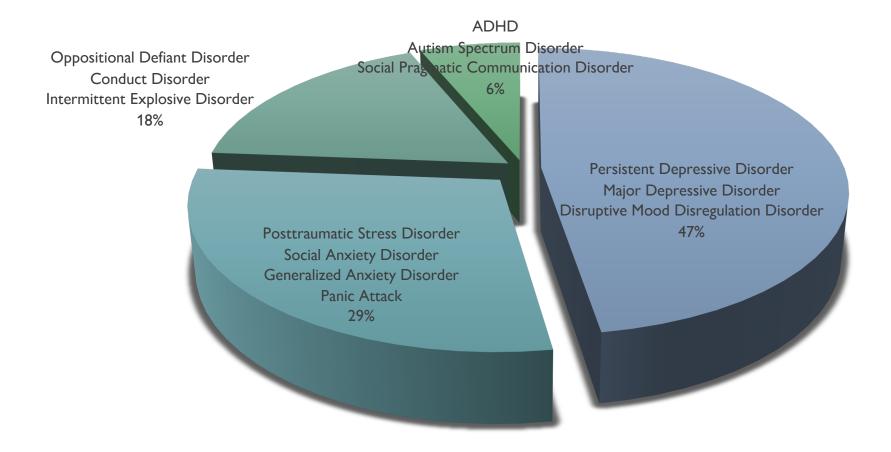
OVERALL RESULTS OF CLINICAL SERVICE MODEL

- The MWA clinical service model continues to be effective in significantly reducing the severity and frequency of psychological symptoms among WM. Moreover, effect sizes (Cohen's *d*) boasted by the MWA clinical services model are two to four times greater (.70 to 1.58) than those reported in over the past 5-decades of research on youth psychotherapy (0.29 to 0.61).
- The mental health program at MWA has also proven to be significantly more efficacious than Kaiser Permanente Hospital and local mental health clinics. Effect sizes of these organizations fall below to within average of national research studies on psychological treatment of youth.
- The MWA clinical service model has advantages of accurate diagnoses, consistent use of evidence-based practices, observable measures (versus theoretical constructs), customized and monitored treatment plans, access to caregiver support, social-emotionally trained key educational staff (PMSC), and ongoing empirical research that informs program refinement.

RESEARCH PARAMETERS

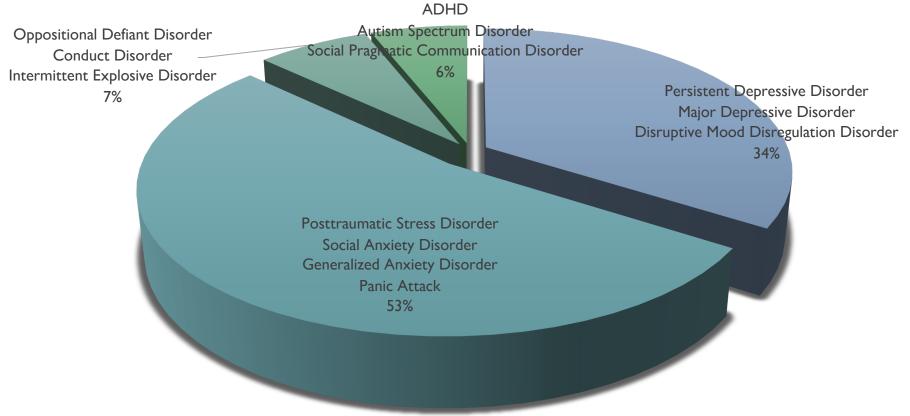
- For the 2019/2020 AY, 143-WM participated in a course of clinical treatment. However, only 82-WM had complete datasets for statistical analysis.
- For the 2020/2021 AY, 150-WM underwent a course of clinical services. However, only 114-WM had complete datasets for statistical analysis.
- Incomplete datasets were largely a result of WM having an insufficient number of sessions before taking posttest measurements. WM begin and end mental health services at different points throughout the academic year.
- Given the within group research design, more than enough students participated in mental health services to statistically represent the clinical population at MWA.

PRIMARY DSM-5 DIAGNOSIS FOR 143-WM



PRIMARY DSM-5 DIAGNOSIS FOR 150-WM





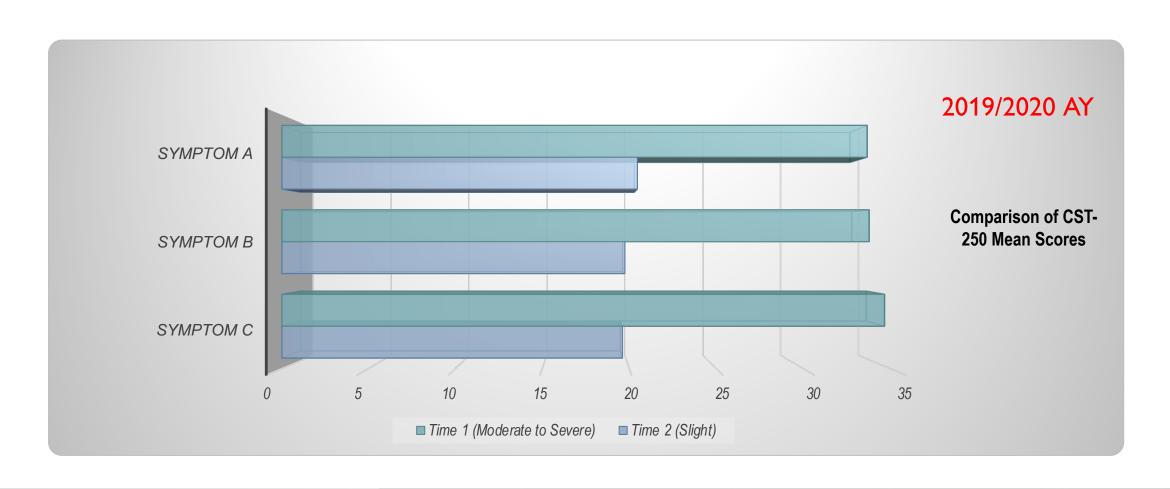
MEASURES OF EFFICACY FOR CLINICAL SERVICE MODEL

- **Severity** is a measure of disability caused by a psychological symptom to a student's learning process, or integration into MWA culture that takes developmental perspective and scope of difficulty into consideration.
- **Frequency** is simply the number of times a student demonstrates a clearly defined psychological symptom within a fixed time period, under pre-specified conditions.

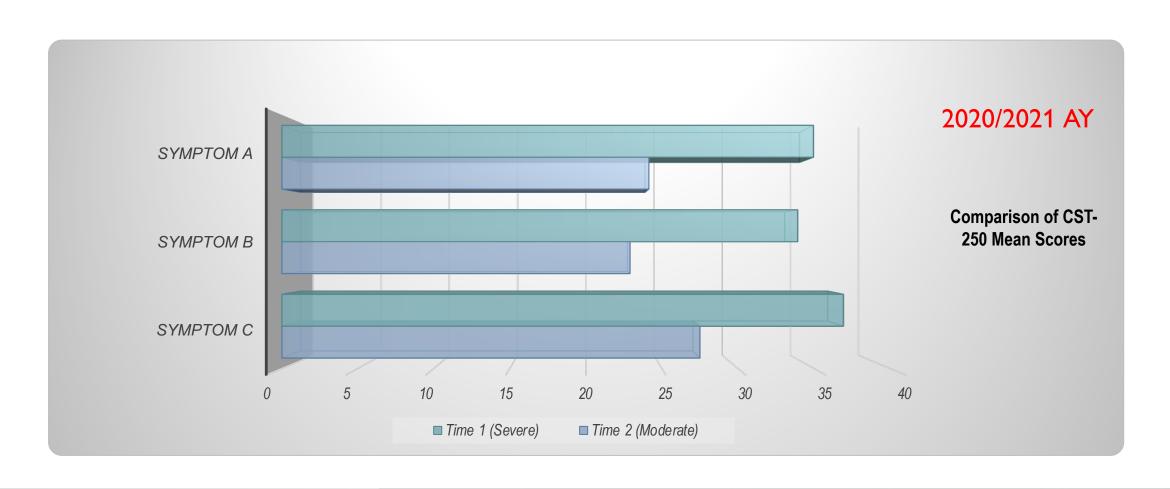
CATEGORIES OF CLINICAL PROBLEMS

- **Symptom A** pertains to subtle cognitive dysfunction that interferes with a student's ability to attend in class: e.g., distractibility, reasoning errors, tangential and circumstantial thinking, poor decision-making, thought blocking, mental lethargy, etc.
- **Symptom B** deals with behavior that impedes a student's interactions with peers and authority figures: e.g., withdrawal, isolation, defiance, hyperactivity, moodiness, defiance, etc.
- **Symptom C** represents behavior that poses harm to self, other, or MWA culture: e.g., self-debasing comments, self-mutilation, suicidal and homicidal ideation, bullying, physical altercations, substance abuse, hallucinations, delusions, etc.

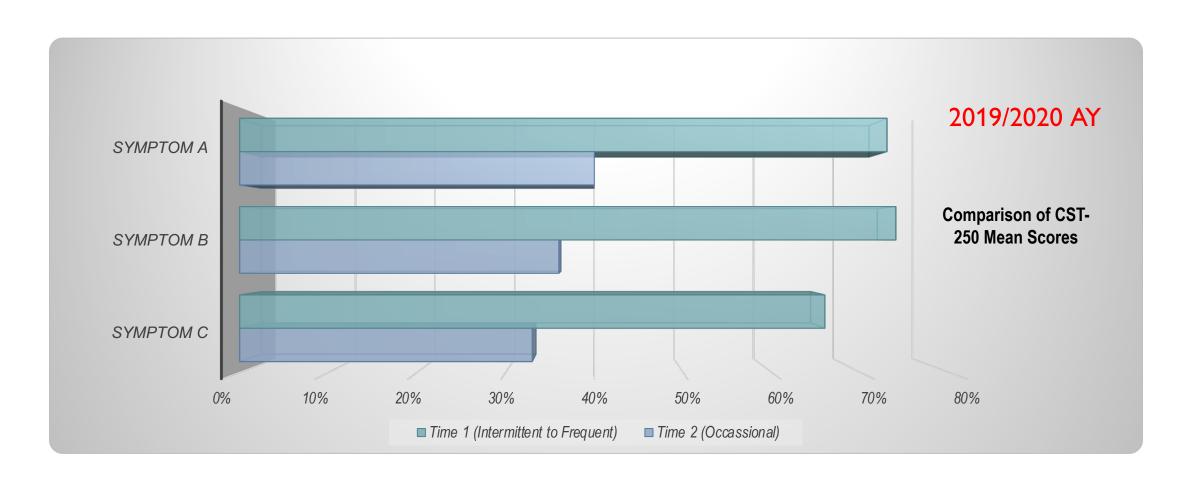
CHANGE IN SYMPTOM SEVERITY IN TREATMENT FOR 82-WM



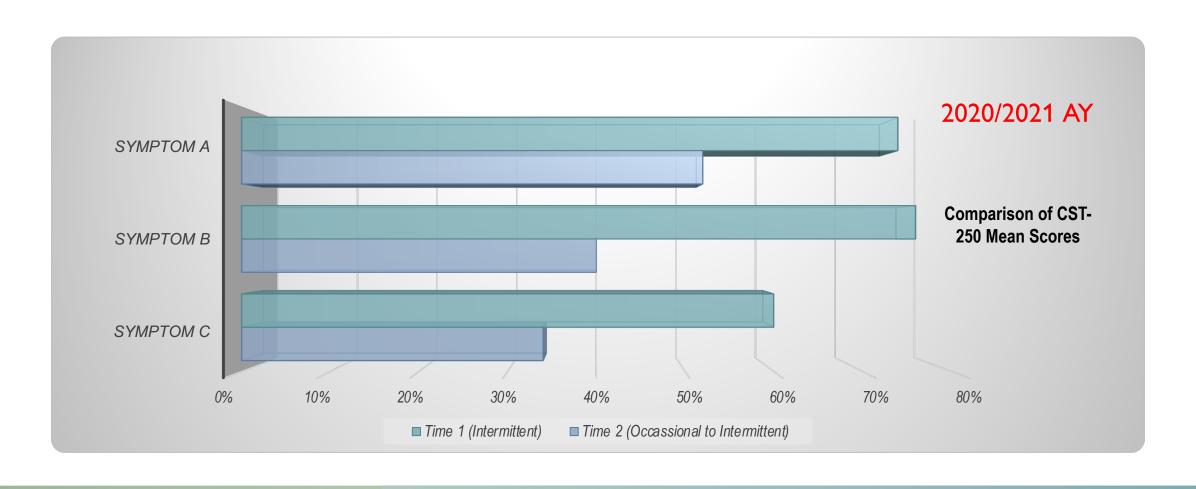
CHANGE IN SYMPTOM SEVERITY IN TREATMENT FOR 114-WM



CHANGE IN SYMPTOM FREQUENCY IN TREATMENT FOR 82-WM



CHANGE IN SYMPTOM FREQUENCY IN TREATMENT FOR 114-WM



DESCRIPTIVES FOR TREATMENT OUTCOMES ANALYSES FOR 82-WM

2019/2020 AY

Metric Type	Time 1	Time 2
Severity of Symptom A	34.43	20.57
Frequency of Symptom A	.77	.39
Severity of Symptom B	34.98	19.57
Frequency of Symptom B	.77	.36
Severity of Symptom C	34.16	19.61
Frequency of Symptom C	.68	.33

DESCRIPTIVES FOR TREATMENT OUTCOMES ANALYSES FOR 114-WM

2020/2021 AY

Metric Type	Time 1	Time 2
Severity of Symptom A	34.98	24.15
Frequency of Symptom A	.74	.52
Severity of Symptom B	33.94	22.91
Frequency of Symptom B	.76	.40
Severity of Symptom C	36.95	27.51
Frequency of Symptom C	.60	.34

REPEATED MEASURES ANALYSIS OF TREATMENT OUTCOMES FOR 82-WM

2019/2020 AY

Pillia's Trace	F-Value	Hypo. df	Error df	Alpha	Cohen's d	Magnitude	Significant
.79	27.42	6	45	.00	1.48	Large	Yes

REPEATED MEASURES ANALYSIS OF TREATMENT OUTCOMES FOR 114-WM

2020/2021 AY

Pillia's Trace	F-Value	Hypo. df	Error df	Alpha	Cohen's d	Magnitude	Significant
.77	60.24	6	108	.00	1.46	Large	Yes

POST HOC COMPARISONS FOR REPEATED MEASURES ANALYSIS FOR 82-WM

2019/2020 AY

Univariate	F-Value	Alpha	Cohen's d	Magnitude	Significant
Severity of Symptom A	88.58	.00	1.32	Large	Yes
Frequency of Symptom A	96.62	.00	1.41	Large	Yes
Severity of Symptom B	101.58	.00	1.58	Large	Yes
Frequency of Symptom B	108.00	.00	1.46	Large	Yes
Severity of Symptom C	62.67	.00	1.35	Large	Yes
Frequency of Symptom C	58.91	.00	1.21	Large	Yes

POST HOC COMPARISONS FOR REPEATED MEASURES ANALYSIS FOR 114-WM

2020/2021 AY

Univariate	F-Value	Alpha	Cohen's d	Magnitude	Significant
Severity of Symptom A	147.88	.00	1.06	Large	Yes
Frequency of Symptom A	108.64	.00	.70	Large	Yes
Severity of Symptom B	200.87	.00	1.18	Large	Yes
Frequency of Symptom B	206.22	.00	1.38	Large	Yes
Severity of Symptom C	96.65	.00	.95	Large	Yes
Frequency of Symptom C	115.50	.00	.89	Large	Yes

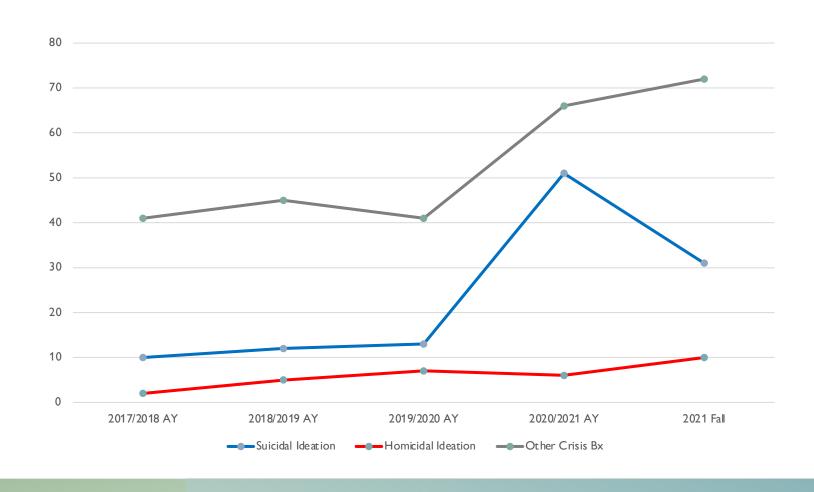
MATRIX FOR CRISIS LEVEL DETERMINATION

Level	Example
High Crisis	Escalating Bizarre Behavior, Suicidal Plans, Homicidal Plans, & Hallucinations
Medium Crisis	Suicidal Ideation, Homicidal Ideation, Self Mutilation, Isolative, Destruction of Property & Combative
Low Crisis	Misperception, Agitation, Suicidal Ideation, Homicidal Ideation & Withdrawn
Emotionally Distraught	Profanity, Non-Compliance & General Disrespect
Transient Negative Emotions	Raised Voice, Tearful, Mild Opposition & Sulking
Minor Distress	Venting of Emotions & Perceptions

CRISIS TRENDS FOR 412-RISK/THREAT ASSESSMENTS

Crisis Type	2017/2018 AY	2018/2019 AY	2019/2020 AY	2020/2021 AY	Fall of 2021
Suicide Ideation	10	12	13	51	31
Homicide Ideation	2	5	7	6	10
Other Crisis Bx	41	45	41	66	72
TOTAL	53	62	61	123	113

CRISIS TRENDS FOR 412-RISK/THREAT ASSESSMENTS



ADVERSE CHILDHOOD EXPERIENCE (ACE)

- ACEs are traumatic events occurring before the age of 18. ACEs include all types of abuse and neglect along with parental mental illness, substance use, divorce, incarceration, and domestic violence. From 1995 to 1997, the Center for Disease Control and Kaiser Permanente Hospital conducted a study with over 17,000 subjects that revealed 40% of them had two or more ACEs.
- The same landmark study found a significant relationship between the number of ACEs a person experienced and variety of negative outcomes in adulthood such as poor academic achievement, risky behavior, heart disease, diabetes, substance abuse, and poor mental health. The more ACEs experienced, the greater the risk for these outcomes.

AVERAGE ACE SCORE FOR 82-WM

- Ninety-three percent of WM receiving psychological treatment have ACEs.
- If WM don't receive appropriate psychological treatment before 18-years of age, they have a 500% increase for risk of alcoholism (M. Straus, 2019) as adults.
- If WM don't receive appropriate psychological treatment before 18-years of age, they are 50% more likely to experience hallucinations if they abuse substances as adults (M. Straus, 2019).

UNIVARIATE TESTS OF ACE SCORE WITH DEMOGRAPHICS FOR 82-WM

Comparisons	F-Value	Alpha	Significant
Ethnic By ACE Score	2.53	.09	No
Gender By ACE Score	.99	.32	No
School Division By ACE Score	.149	.70	No
DSM-5 Diagnosis By ACE Score	1.17	.33	No

OTHER RESULTS FROM ACE STUDIES FOR 82-WM

- 31% of WM suffered emotional abuse
- 46% of WM suffered emotional neglect
- 27% of WM live with caregivers who have psychiatric disturbance
- 12% of WM have mothers who were treated violently at home
- 32% of WM have divorced or separated parents
- 11% of WM have an incarcerated family member who used to live with them
- 13% of WM live with persons who abuse substances

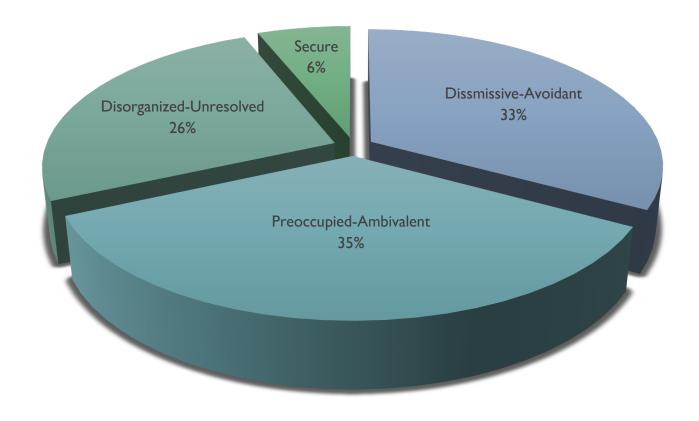
ATTACHMENT

- Attachment can be defined as a deep and enduring emotional bond between parent and child in which closeness and security are sought. The caregiver is regularly faced with the task of responding sensitively and appropriately to the child's needs.
- Research dating back to at least 1980 suggest that Attachment is a strong predictor of future temperament, school adjustment, stress tolerance, and ability to manage conflict in youth and adults. Scientists have also discovered four Attachment Styles.

4-ATTACHMENT STYLES

- Secure: WM value intimate relationships, and have capacity to maintain close relationships without losing personal autonomy.
- Dismissive-Avoidant: WM downplay importance of close relationships, and protect themselves against painful feelings stemming from neglect, emotional distance or rejection.
- Preoccupied-Ambivalent: WM seek relationships too easily, and tend to behave in an equivocal and clinging way.
- Disorganized-Unresolved: WM tend to view themselves as unlovable and others as unreliable. They avoid close relationships due to fear of rejection, personal insecurity, and distrust of others.

ATTACHMENT STYLES FOR 82-WM



SUMMARY OF MWA ATTACHMENT STUDIES

- There is a significant relationship between Attachment Style and Primary Diagnosis. WM who suffer from disruptive behavior disorders such as Oppositional Defiant Disorder and Conduct Disorder are more likely to have a Disorganized-Unresolved Attachment Style.
- WM who satisfy criteria for Major Depressive Disorder, Generalized Anxiety Disorder, and other mood disturbances are significantly more likely to show Dismissive-Avoidant and Preoccupied-Ambivalent Attachment Styles.
- Although Gender and Attachment Style are independent, the relationship between Ethnicity and Attachment Style is significant. African American WM are more likely to have a Disorganized-Unresolved Attachment Style. In contrast, Latinx WM tend to be overrepresented with Dismissive-Avoidant and Preoccupied-Ambivalent Attachment Styles.

SUMMARY OF MWA ATTACHMENT STUDIES

- The association between Attachment Style and Psychosocial Development Stage is statistically significant. Latinx WM in the Identity vs. Confusion stage, who have a Dismissive-Avoidant Attachment Style, attempt to manage vulnerability by excluding thoughts and feelings from awareness. This leads to memory problems, fragmented processing of information, and delayed self-identity development.
- African American WM in the Industry vs. Inferiority stage, who have a Disorganized-Unresolved Attachment Style, attempt to compensate for a sense of incompetence through physical aggression and task avoidance. Regrettably, these phenomena are likely to gives rise to under achievement, school suspension, "blanking out," and other dissociative states.

NON-PARAMETRIC TESTS OF ATTACHMENT STYLE FOR 82-WM

Comparison	Chi-Square	Alpha	Cohen's d	Magnitude	Significant
Attachment By Primary Diagnosis	45.73	.00	1.21	Large	Yes
Attachment By Developmental Stage	7.28	.03	.31	Medium	Yes
Attachment By Ethnic Group	18.26	.00	1.12	Large	Yes
Attachment By Gender	2.12	.35	NA	NA	No

ACTION ITEMS FOR MWA MENTAL HEALTH TEAM

- 1. When ACEs are identified or suspected in WM, they will be assessed and integrated by clinicians using a "top down" processing approach that addresses at minimum safety, trust, power/control, esteem, and intimacy. WM will also be provided with normalization interventions, and education about how discussing traumatic events during childhood protects them from physical health problems, psychiatric illness, and substance abuse issues throughout adulthood. The latter also includes how processing stressful situations during childhood increases their chances of succeeding in college.
- 2. Attachment styles of WM will be assessed during the intake process along with primary diagnosis.

ACTION ITEMS FOR MWA MENTAL HEALTH TEAM

- 3. WM who have insecure attachment styles must undergo grounding interventions immediately before and after discussions of traumatic material. These WM will also receive one to two brief contacts with clinicians between sessions.
- 4. Empathy, aggression replacement, and personal asset management training must be integrated into treatment plans of middle school, African American WM who have a Disorganized-Unresolved Attachment style.
- 5. Caregivers of African American WM in treatment will be consulted about ways to affirm, celebrate, and identify progress and strengths of their students.
- 6. Modified Thought Logs will be utilized with Latinx WM in high school who have a Dismissive-Avoidant Attachment style to facilitate reflection, connection between emotionally charged situations, processing efficiency, and accurate recall.

ACTION ITEMS FOR MWA MENTAL HEALTH TEAM

7. In order to equalize treatment effects across primary diagnosis subgroups of WM, FPA clinicians will spend more time implementing interventions to clear thinking errors, while developing behavioral analysis and informal mindfulness skills in WM who suffer from Anxiety and Disruptive Behavioral Disorders.

ACTION ITEMS FOR MWA STAFF

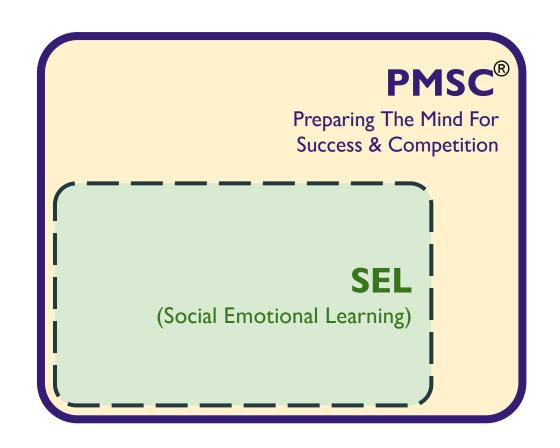
- 1. Teacher should implement 2-minute breathing exercises with WM immediately before and after lessons pertaining to race, politics, abuse, and other potentially unsettling topics. This should be followed by teachers using the PMSC Coping Skills model in a group format.
- 2. When teachers or deans receive direct or indirect information about WM experiencing a traumatic event, they should be referred to MWA mental health team for evaluation and potential "top down" processing.
- 3. The director of curriculum and instruction should assess the value and appropriateness of health and wellness teachers integrating information about the relationship between ACEs and physical health (i.e., diabetes, high blood pressure, ulcers, etc.) into designated lesson plans.

ACTION ITEMS FOR MWA STAFF

- 4. Teachers and deans working with middle school students are recommended to intentionally guide African American WM in accurately identifying emotions and psychological needs of historical figures (i.e., during lessons), and peers they struggle to properly engage (e.g., conflict, bullying, etc.). This can be done by referencing the Relationship and Coping models of PMSC.
- 5. Latinx WM in high school should be supported by teachers in briefly identifying their personal thoughts, feelings, and behavioral reactions to topics they learn in class. This can be done by leveraging the Coping model of PMSC. Subsequently, Latinx WM must be encouraged to discover themes across these data related to various topics discussed in class.

RELATIONSHIP BETWEEN SEL, PMSC, & EDUCATION

- Academic success is influenced by social & emotional factors
- SEL focuses on Skills while PMSC® focuses on Competencies (Skills + mindset, understanding & application)
- PMSC[®] accommodates for cultural & community factors



HOW PMSC® & FPA CLINICAL SERVICES HELPS POSITION MWA FOR FUTURE SUCCESS?

ERMHS

- Regularly scheduled appts.
- Diagnosis affects learning and social
- Reimbursement

PMSC®

- Competency based
- Culturally relevant
- Performance driven

PMSC[®] Digital

- In-person and remote learning
- Self-paced
- "Gamification"

hank you.