

Improving Emotion Regulation in Neurodivergent Transition-Age Students

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Background

- Neurodivergent youth experience poor mental health, educational, and employment outcomes.
- Disproportionate societal barriers exacerbate known challenges, like emotion regulation, due to their disability.
- The Cognitive Skills Enhancement Program (CSEP)** is a 15-week cognitive rehabilitation program designed for neurodivergent young adults transitioning to post-secondary education.
- CSEP utilizes multiple evidence-based practices to improve self-awareness and employment outcomes. CSEP targets:
 - Emotion Regulation
 - Social Skills
 - Vocational Readiness
 - Community Engagement

Tier I
Individuals who are currently participating in full-time term-long CSEP programming (i.e., Monday – Friday from 8:15 AM to 3:30 PM for 15-weeks)

Tier II
“Graduates” of CSEP Tier I who are currently enrolled in an HGAC training program. Receive services and intervention throughout training program.

Tier III
Students who are currently enrolled in a program but haven’t participated in CSEP Tier I. Referred for consultation and/or services during training program.

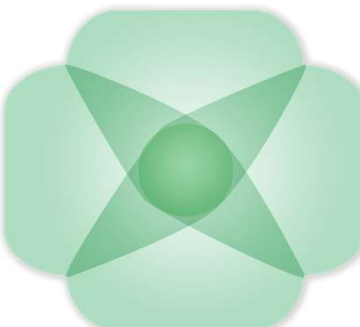
Objective & Methods

- Establish effectiveness of the **Emotion Awareness and Skills Enhancement (EASE)** program for improving CSEP participants’ emotion dysregulation.
- 68** neurodivergent young adults (ages 18-27) competed EASE as part of CSEP.
- Pre, mid, post self-report surveys conducted.
- Repeated measures multivariate analysis of variance (rMANOVA) to analyze improvement over time.


Key Findings

- Participants had significant improvements in emotion dysregulation post-treatment.
- Improvements in emotion dysregulation were associated with significant reductions in anxiety ($p<.001$) and depression ($p<.001$).
- Participants were satisfied with the EASE program.

CSEP participants demonstrated significant improvements in emotion regulation following completion of the EASE program.




EASE
TOOLS FOR CALMING THE CHAOS



89% of participants reported that CSEP helped them manage their emotions, while **91%** of participants reported finding EASE helpful.

CSEP Tier I Fall 2023 Participant:

“EASE was personally and mentally a life changer for me and I will use the strategies from it for when I have stressful scenarios.”



Improving emotion regulation is important for neurodivergent young adults transitioning to employment and post-secondary education.




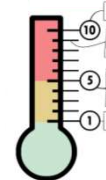
CSEP Cognitive Skills Enhancement Program
A Collaborative Project by the Commonwealth Technical Institute at the Hiram G. Andrews Center and the University of Pittsburgh





pennsylvania DEPARTMENT OF LABOR & INDUSTRY
COMMONWEALTH TECHNICAL INSTITUTE (CTI) AT THE HIRAM G. ANDREWS CENTER (HGAC)

EASE Program

- 16-session mindfulness-based intervention to improve emotion regulation in autism, along with other types of neurodivergence.
- 2 steps in EASE:
 - Build awareness of emotion
 - Use 4 EASE Tools to manage emotions & meet goals





Participant Demographics

- 68 participants over 3 years and 8 terms.
- Cohort size ranged from 4 to 12 participants.

Demographics	Statistics/Percentages
ASD Diagnosis ONLY	52 Participants (76%)
ADHD Diagnosis ONLY	50 Participants (74%)
ASD & ADHD COMBINED	38 Participants (56%)
Other Cognitive Diagnoses	Specific Learning Disability – 27 Participants (40%) Cerebral Palsy – 3 Participants (4%) Learning Disability – 2 Participants (3%) Intellectual Disability – 2 Participants (3%) Traumatic Brain Injury – 1 Participant (1%)
Age	19.6 yrs. old (±1.7 yrs.) Total Range = 18-27 yrs. old
Gender Identity	Male – 57 Participants (84%) Female – 8 Participants (12%) Non-Binary/Non-Conforming – 3 Participants (4%) Other – 3 Participants (4%) Transgender – 1 Participant (1%)
Race/Ethnicity	White – 52 Participants (76%) Black or African American – 10 Participants (15%) Asian – 3 Participants (4%) Did Not Wish to Say – 2 Participants (3%) American Indian/Alaskan Native – 1 Participant (1%) Other – 1 Participant (1%)
WAIS Scores	Full Scale Score – 86.8 (±12.8); Total Range = 67-121 VCI – 94.8 (±14.1); Total Range = 72-136

Results

- Significant overall effect of CSEP program on participant outcomes over time ($F_{18,235} = 6.95^{***}$).
- Participants **improved significantly** in **social skill knowledge, emotion dysregulation-reactivity, and emotion dysregulation- dysphoria**.

Measure	Baseline	Midpoint	Endpoint	Significance
Emotion Dysregulation Inventory Reactivity Theta	-0.9 (0.8) [-2.0 - 0.9] _{n=68}	-0.9 (0.8) [-2.0 - 0.9] _{n=52}	-1.2 (0.7) [-2.0 - 0.1] _{n=51}	$F_{2,151} = 3.91^*$
Emotion Dysregulation Inventory Dysphoria Theta	-0.3 (0.8) [-1.4 - 1.5] _{n=68}	-0.5 (0.7) [-1.4 - 1.2] _{n=52}	-0.6 (0.7) [-1.4 - 1.1] _{n=51}	$F_{2,150} = 4.09^*$

Acknowledgements

- Pennsylvania Department of Labor and Industry Office of Vocational Rehabilitation's **Commonwealth Technical Institute (CT) at the Hiram G. Andrews Center (HGAC)**
- Faculty, students, and staff that have served in CSEP
- Young adults that have participated in this program