# EVALUATING A TIER I RESILIENCE PROGRAM-EMPOWERU: A PRELIMINARY ANALYSIS

# A RESEARCH REPORT

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Publication Date: July 30, 2024

Not-peer Reviewed

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# Evaluating A Tier I Resilience Program – EmpowerU: Preliminary Analysis

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#### **Abstract**

Combatting learning loss in schools is as much a mental health issue as an academic one. With one in four students suffering from poor mental health since the onset of the COVID-19 pandemic, the need for Tier I and Tier II resilience solutions is critical. Addressing these challenges requires comprehensive strategies focusing on academic recovery and prioritizing students' mental, emotional, and psychological well-being. EmpowerU is a Multi-Tiered System of Support (MTSS) program that delivers durable social-emotional skills and support at both Tier I and Tier II/III levels and is designed to build student resilience, coping skills and academic persistence. This program was framed using the Transtheoretical Model (TTM) of behavioral change constructed by Prochaska and DiClemente (1986) to measure pre- to post-student progress on goals students set themselves to improve their well-being, resilience, and motivation. This study focuses on the impact of EmpowerU's Tier I foundational prevention program that allows classroom teachers and other school support staff to deliver proactive instructional interventions that reduce at-risk behaviors, improve academic engagement/motivation, and enhance students' well-being so they can focus and learn.

This quasi-mixed measure design with comparison groups (Johnson & Onwuegbuzie, 2004) was performed in a small rural school district in the U.S. Midwest (n=75; 38 fifth graders and 37 eighth graders) and suggested a decrease in at-risk behaviors after receiving the EmpowerU curriculum, as measured by the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS) behavior screening tool. The EmpowerU-Starting Point Self-Reflection Assessment (SPA) tool, a vital part of the Tier I curriculum, was administered to classrooms in a phased implementation of students to compare key resilience indicator improvements of students who had not yet received EmpowerU instruction to those students who had received EmpowerU instruction. The comparison data from the pre-post SPA indicates a significant improvement in behavior among 5th graders (Cohen d= 0.783), and among 8th graders (Cohen d= 0.6634), when compared to their respective control groups. EmpowerU instruction positively impacts students' goals and well-being. However, it is recommended that a more robust experimental design be completed with rigorous statistical analysis to further confirm these preliminary results.

**Keywords:** Tier I behavioral instruction, student engagement, resilience instruction, coping skills, persistence training, self-regulation skills, at-risk reduction, adolescent behavior, adolescent mental health support, resiliency training, strengths-based instruction, student mental health efficacy, Multi-Tiered Systems of Support

### Introduction

The growing mental health crisis among school-age children has highlighted a significant shortage of school counselors, psychologists, social workers, and mental health therapists. The National Association of School Psychologists recommends a ratio of 1 school psychologist per 500 students, while the American School Counselor Association advises a ratio of 1 school counselor per 250 students. However, current reports indicate that the national average is far from these recommendations, with ratios for school psychologists and counselors averaging 1 to 1,211 and 1 to 408, respectively (ASCA, 2023; Hall, 2023). Additionally, colleges and universities are experiencing fewer students selecting these very needed majors that produce professionals who can provide mental health support to schools. Thus, finding others who can expeditiously bring mental health services to students is of great concern in school districts across America.

The EmpowerU program is a robust, turnkey mental health and resiliency solution implemented within a Multi-Tiered System of Support (MTSS) framework that supports district teams in identifying student levels of need and delivering the right tier of support for the right student at the right time. This tiered program provides a personalized student experience at Tiers I and II/III levels. The objective at each tier is to build students' resilience, persistence, and coping skills by reducing mental health risk factors experienced by students at increasing intensities. Specifically, this analysis focuses on the Tier I intervention of this program, where classroom teachers delivered weekly emotional and mental wellness lessons to students while providing self-care for themselves.

This is the first empirical study examining the effectiveness of EmpowerU's Tier I program in reducing mental health risk factors. However, an overview of current highly recommended mental health programs and curriculums by the Wallace Foundation unveiled an absence of a science-based instructional design like EmpowerU's among those recommended (Jones, S.M. et al., 2022). The goal-setting and self-monitoring feature by students in the EmpowerU program is unique compared to the Foundation's recommended mental health programs.

Additionally, the instructional design follows a methodology where teachers and students complete mental health screeners, and immediately start to learn calming tools and self-regulation strategies. Thereafter, weekly lessons containing core concepts are taught, practiced, and applied to help lower risk factors that challenge continuous growth. Students develop their own emotional and behavioral goals as they integrate concepts learned into their lives and increase in confidence, hope, and resilience. Gathering data on students during key transition years, 5<sup>th</sup> grade to middle school and 8<sup>th</sup> grade to high school (Jones, S.M. et. al, 2022), is targeted in the design to measure the impact that EmpowerU's Tier I intervention, given the impact that those periods of development have on students' at-risk behaviors.

### **Population (Sample)**

The data for this study was gathered during the 2021-2022 school year in a small rural school district in the Midwestern United States. According to the National Center for Education

Statistics (NCES, 2023), the district had 593 total students and 54.57 classroom teachers (FTE) and boasted a student/teacher ratio of 10.85 in K-12.

The community was 95.7% White (non-Hispanic), 1.92% White (Hispanic), 0.427% African American, 0.356% American Indian & Alaska Native (Hispanic), and had 13 or 0.925% foreignborn citizens (DATA USA, 2022). Additionally, the pre-pandemic median household income was \$65,961 among a population where 82.9% of adults graduated high school and earned an associate's degree or had some college. Ninety percent (90%) of adults were in the labor force in 2021, while 13% of families received food stamps/SNAP benefits. A more recent report suggests the demographics of the minority population steadily increased to 10% and that 47.6% of families have been economically disadvantaged over the past five years (US News, 2024). Thus, in 2021, the school's administrators reported observing increasing negative trends like those of urban communities (e.g., crime, drugs, homelessness, mental health indicators) in this rural community. These same community demographics are reflected in the 38 fifth graders and 37 eighth graders in this study (n=75).

Before EmpowerU, counseling and mental health wellness were handled by the district's lone guidance counselor and one school psychologist. Other student support service workers were reported (NCED & CCD, 2023); however, they were not identified as credentialed counselors or had any background in mental health support. Additionally, there was no formal curriculum taught for students to be able to identify, reduce, or eliminate mental health challenges formally. Therefore, it was paramount for classroom teachers to assist students in developing skills and strategies to cope with difficult emotions and challenging behaviors that make them susceptible to academic failure. Some teachers in the district experienced the same traumas that students and their families faced during the recent worldwide pandemic. Therefore, teachers also needed mental health support and self-care while caring for students.

### Study Design/Methodology

This study was driven by a quasi-mixed measures design (Johnson & Onwuegbuzie, 2004). In 5th grade, students were randomly assigned to individual classrooms (n=19/for classroom one and 19 for classroom two), and in 8th grade, students were randomly assigned to four classrooms (n=9-10 per section). The study design used phased implementation in both 5<sup>th</sup> and 8<sup>th</sup>-grade classrooms to create control groups to measure comparison impact.

## **Teacher Training**

To ensure the effectiveness of instruction, the program was kicked off with the training of the 5th-grade teachers, 8th-grade teacher, and school counselor through their completion of an asynchronous EmpowerU training course designed to help teachers understand:

- the basic philosophy of the EmpowerU program is to discover the power of an outcomesdriven curriculum versus a process-driven one. EmpowerU is a performance-based, outcomes-driven program designed for students to become aware of and change undesirable behaviors.
- the instructional model and methodology of EmpowerU,

- the EmpowerU approach to resilience training and how it differs from other resilience and counseling supports, and
- the EmpowerU curriculum, lessons, and tools they will use to deliver instruction.

Once the overview training course was completed, these educators completed a virtual workshop (via Zoom), which included more in-depth, hands-on training by EmpowerU. This workshop was a more intensive walk-through of the grade-specific lessons, Universal Design format designed to meet the National Health Education Standards and the Collaborative for Academic, Social, and Emotional Learning (CASEL) competencies, which are gold standards for building a curriculum for a caring, just, and more thriving community. Helping students to develop and maintain personal resilience, persistence, and coping skills is foundational to students' well-being.

## **Student Delivery**

The teachers delivered the lessons for 5th-grade students weekly during 30–40-minute blocked time in the classroom over 11 weeks and for 8th-grade students during a quarterly health class over the same period. During preadolescents and adolescent years, emotional competence predicts students' school engagement, academic achievement, career, and lifelong success (Vorbach, A.M. & Foster, S.F., 2003). Therefore, the critical transition grade levels of these 5th and 8th-grader students during this stage of development were chosen to test the impact that EmpowerU has on reducing known emotional and behavioral risk factors as indicated by the SAEBRS and mySAEBRS screener. Farrington et al. (2012) highlight the importance of developing "non-academic" mindsets and behaviors like persistence, time management, work ethics, cooperation, communication, critical thinking, and social and emotional problem-solving skills during elementary transition years to persist in successful middle and high school matriculation and beyond. Thus, this study focuses on the critical fifth and eighth-grade years to evaluate the impact of the EmpowerU K-8 Tier I curriculum, and precisely the program's unique approach to students identifying and setting goals in academic, personal, social, and emotional areas to improve their resilience before transitioning to middle and high school.

### Assessment Instruments

Teachers completed the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS) on each student pre- and post-EmpowerU instruction, and according to SAEBRS data, both 5th and 8th-grade control groups had similar pre-instruction risk levels. Students also completed the mySAEBRS version of the screener pre- and post-instruction. The mySAEBRS is designed and validated to report on students' self-awareness of their emotional and behavioral risk levels.

The highly researched SAEBRS instrument, a universal screener for behavior and emotional risk, is valid and reliable for use in K-12 settings (Whitley & Cuenca-Calino, 2020). It reliably differentiates between students' risk levels, helping schools quickly identify students who need intervention to build these competencies through programs like EmpowerU to improve well-being (Gresham & Elliott, 2011).

Students were also administered the EmpowerU Starting Point Self-Reflection Assessment (SPA) at the onset of the EmpowerU instruction and again post-instruction to measure progress on the personal, social, emotional, and academic goals they set at the program's start. The Starting Point Self-Reflection Assessment is structured to assist students as they identify areas of emotional and behavioral challenge and set goals for change. The themes of this unique tool are aligned with the SAEBRS area of measurement, and they focus on four key thematic areas: Personal Wellness, Emotional Regulation, Social Confidence and Connection, and Academic Motivation and Organization. Because the purpose of this tool is self-reflective and is a new performative feature when compared to other screeners, its features and their use are essential to distinguish:

## Key Features of the Empower U Starting Point Self-Reflection Assessment

- 1. **Pre-Assessment:** Students respond to a five-point scale of descriptive behavior postulates, ranging from 1 ("I don't do this and have no awareness or desire to work on it") to 5 ("I regularly do this as part of my everyday routine"), under each thematic area to self-identify emotional/behavioral risks and challenges they face and the changes they are motivated to make. These phases of change align with the Transtheoretical Model Phases of Change.
- 2. **Goal Setting:** Based on the pre-assessed results, students set personalized goals aimed at reducing high-risk behaviors and improving their emotional and behavioral competencies.
- 3. **Curriculum Integration:** The EmpowerU curriculum, facilitated by classroom teachers over eleven weeks, addressed the four thematic areas through structured lessons and activities.
- 4. **Reflection and Journaling:** At the end of each lesson, students engaged in reflective exercises and journaling to track their progress towards their goals and documented improvements in targeted behaviors.
- 5. **Post-Assessment:** After eleven weeks of instruction, students completed a post-assessment using the same Starting Point Self-Reflection Assessment instrument to measure changes in their emotional and behavioral profiles.
- 6. **Analysis:** Pre- and post-assessment data were then subjected to descriptive comparison to assess the effectiveness of the EmpowerU curriculum in meeting its objective to support students' change of at-risk emotions and behaviors.

## **Results and Discussion**

Preliminary analysis indicates that teachers reported that 87% of participants decreased in at-risk behaviors pre- to post-EmpowerU instruction as measured by the SAEBRS, and 71% of students self-reported a decrease in at-risk behaviors using mySAEBRS. Additionally, 82% of participants reported that they had made progress in meeting their self-developed goals after 11 weeks of EmpowerU instruction as measured by the pre- to post-Starting Point Self-Reflection Assessment tool. In addition, short answer responses to a survey and follow-up teacher interviews reported that the EmpowerU curriculum is user-friendly and does not add "another task" for teachers. Teachers using the curriculum reported personal mental health benefits as they learned the content along with students and gained an additional understanding of mental health

issues and intervention strategies that are helpful beyond the classroom. These initial findings underscore the potential of the EmpowerU Tier I program to reduce mental health risk factors and improve student outcomes. The comparison data using the Starting Point Self-Reflection Assessment (SPA) findings between control groups below further support the results by grade level and time of instruction delivery.

*SPA Metrics & Scale:* Based on Transtheoretical Model – Phases of Change. The higher the self-report on each item, the more progress the student has made toward goal achievement in personal, emotional, social, and academic confidence.

### Item Score Scale:

- 1. No desire/awareness to change to improve this item/goal
- 2. Thinking about making a change to improve this item/goal
- 3. Taking first steps/action on change to improve this item/goal
- 4. Actively working on it and doing this new item/goal daily
- 5. Made change and are maintaining this item/goal

## **5th Grade Students Data Comparisons**

The structure of the phased implementation allowed the team to compare the scores of 5th-grade students in Classroom One at the end of their EmpowerU instruction to the scores of students in Classroom Two before they started their instruction to see differences between the two groups (e.g., students in Classroom 1 should have higher item scores because they had instruction. In contrast, Classroom 2 had not yet received instruction, so should have lower scores.

#### Classroom Assignments:

- 5<sup>th</sup> Grade Classroom One: Received EmpowerU instruction in the first semester.
- 5<sup>th</sup> Grade Classroom Two: Received EmpowerU instruction in the second semester.

## Assessments:

- SAEBRS Scores: Similar overall risk levels between groups
- Starting Point Self-Reflection Assessment (SPA): Administered January 2022, based on the TTM model.

# SPA Scores Comparison 5th Grade Classroom One and Two

#### Table 1

Metric	Mean 5th Grade Classroom One Student SPA Average Item Score Post EmpowerU Instruction	Mean 5 <sup>th</sup> Grade Classroom Two Student SPA Average Item Score Pre EmpowerU Instruction.	Impact Difference (5th Grade Classroom One Mean Score minus Classroom Two Mean Score)	Statistical Significance T- Test	Effect Size
Avg Item Score /SPA Question 1-5 (1 being no change, five complete improvement)	3.48	2.72	0.76	0.03	0.783

# 8th Grade Students Comparison

The structure of the phased implementation allowed the team to compare the scores of 8th-grade students in Group One at the end of their instruction to the scores of 8th-grade students in Group Two before they started their instruction to see differences between the two groups (e.g., students in Group 1 should have higher scores (e.g., students in Classroom 1 should have higher item scores because they had instruction. In contrast, Classroom 2 had not yet received instruction, so should have lower scores.

## Classroom Assignments:

- 8th Grade Group One: Received EmpowerU instruction before Group Two
- 8<sup>th</sup> Grade Group Two: Received EmpowerU instruction after Group One.

#### Assessments:

- SAEBRS Scores: Showed similar overall risk levels.
- Starting Point Self-Reflection Assessment (SPA): Administered December 2021, based on the TTM model.

# SPA Scores Comparison 8th Grade Classrooms Between Treatment Group

#### Table 2

Metric	Mean 8th Grade Group One Student SPA Average Item Score Post EmpowerU Instruction	Mean 8 <sup>th</sup> Grade Group Two Student SPA Average Item Score Pre EmpowerU Instruction	Impact Difference (8 <sup>th</sup> Grade Group One Mean Score minus Group Two Mean Score)	Statistical Significance T- Test	Effect Size
Avg Item Score/SPA Question 1-5 (1 being no change, five complete improvement)	3.42	2.78	0.64	0.04	0.663

### **Comparison Data Observations:**

**5th Grade:** Classroom One showed a significant improvement of .76 after receiving EmpowerU instruction compared to Classroom Two student scores before instruction, with a t-test statistical score of 0.033, which shows the results are significant. The effect size (Cohen's d) for the difference between 5th Grade Group One and Group Two in SPA average item scores post-EmpowerU instruction is approximately 0.783, indicating a large effect size.

**8th Grade:** Group One showed an improvement of 0.641304 after receiving EmpowerU instruction compared to Group Two student score before instruction, with a T.Test statistical score of .038, which shows the results are significant. The effect size (Cohen's d) for the difference between 8th Grade Group One and Group Two in SPA average item scores post-EmpowerU instruction is approximately 0.6634, indicating a medium to large effect size.

#### Conclusion

The data suggest that EmpowerU instruction positively impacts students' goals and well-being across different grades and periods. The improvements are more pronounced in some groups than others, indicating varying effectiveness levels or differences in baseline conditions or

implementation fidelity. The EmpowerU program has also demonstrated significant promise in addressing school mental health crises by fostering student resilience, persistence, and coping skills. The unique approach of combining comprehensive, structured lessons with personalized self-reflection and goal setting effectively reduces at-risk behaviors and improves overall student well-being.

# **Key Conclusions:**

- **EmpowerU Encourages Self-Help:** When students set their own goals through self-reflection and can apply concepts to their goals, over 82% of students made goal progress in their emotional and mental health development.
- **Holistic Approach:** By integrating mental health support within the educational framework, EmpowerU addresses academic and mental health needs, ensuring a holistic approach to student development.
- **Positive Outcomes:** The preliminary data show a measurable decrease in at-risk behaviors and a high rate of goal achievement among students.

#### Recommendations

- 1. **Expand Program Implementation:** Schools should consider adopting the EmpowerU program to provide comprehensive mental health support and resilience training across all grade levels.
- 2. **Conduct Further Research:** Additional studies with larger sample sizes and more rigorous statistical analysis are recommended to validate the effectiveness of the EmpowerU curriculum and the Starting Point Self-Reflection Assessment tool and further establish the program's impact.
- 3. **Promote Educator Training:** Invest in training for educators to effectively deliver the EmpowerU curriculum and support students' mental health and well-being.
- 4. **Leverage Technology:** Utilize technology to enhance the delivery and accessibility of mental health support services, ensuring that all students can benefit from programs like EmpowerU.

By integrating these strategies, schools can proactively address the mental health crisis, fostering a supportive environment that promotes student growth and academic success. EmpowerU stands as a promising program that helps schools get ahead of the student mental health crisis and supports the holistic development of every student.

#### References

American School Counselor Association. (2024). School Counselor Ratios. Retrieved June 13, 2024, from ASCA Website.

Farrington, C.A., et al. (2012). Teaching Adolescents to Become Learners: The Role of Non-Cognitive Factors in Shaping School Performance. University of Chicago Consortium on Chicago School Research. Retrieved May 29, 2024, from UChicago Consortium.

Gresham, F.M., Elliott, S.N., Vance, M.J., Cook, C.R. (2011). Comparability of the Social Skills Ratings System to the Social Skills Improvement System: Content and Psychometric Comparisons. School Psychology Quarterly, 26(1), 27-44.

Hall, L. (2023). School Psychologist to Student Ratio in Your District. Retrieved June 13, 2024, from Care Options for Kids.

Johnson, R.B., Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. Educational Researcher, 33(7), 14-26.

Jones, S.M., et al. (2022). Navigating SEL from the Inside Out: Looking Inside and Across Leading SEL Programs. The Wallace Foundation. Retrieved May 29, 2024, from Wallace Foundation.

Kilgus, S.P., et al. (2016). Psychometric Defensibility of the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS). Retrieved June 24, 2024, from ScienceDirect.

National Center for Education Statistics. (2023). District Details. Retrieved June 6, 2024, from NCES.

Prochaska, J., DiClemente, C. (1986). Toward a Comprehensive Model of Change. In W.R. Miller & N. Heather (Eds.), Treating Addictive Behaviors. Springer, Boston, MA.

U.S. News & World Report. (2024). School Districts Overview. Retrieved June 11, 2024, from US News.

Vorbach, A.M., Foster, S.F. (2003). The Relationship Between Emotional Competence and Social Competence in Early Adolescence. Paper presented at the 2003 Biennial Meeting of the Society for Research in Child Development. Tampa, FL. Retrieved June 20, 2024.