Wilder Research

Efficacy of a Brief School Mental Health Intervention

Key Findings from Minnesota High Schools

In 2016, the University of Washington's School Mental Health Assessment, Research, and Training (SMART) Center launched a three-year study examining the feasibility, effectiveness, and efficiency of a Brief Intervention Strategy for School Mental Health Clinicians (BRISC). SMART partnered with Wilder Research and the University of Maryland to collect data in three states, including Minnesota, Maryland, and Washington. This report presents background information about BRISC and key findings from the study, with a focus on Minnesota.

The BRISC intervention

BRISC is a manualized intervention strategy for professionals working individually with high school students experiencing mental health symptoms or other emotional and behavioral stressors affecting their ability to succeed. The intervention was developed to be brief, evidence-based, flexible, and tailored to high school students for use in a school setting. BRISC is designed to be completed in four sessions:

1. Engagement, informal assessment, and problem identification
2. Problem solving
3. Continued problem solving and teaching skills as needed (e.g., stress and mood management, realistic thinking, communication skills)
4. Review student's needs and identify plan for next steps

Study design

Wilder partnered with five mental health agencies that serve 17 Twin Cities metro area high schools across 13 school districts (Figure 1). Each school was assigned to either the intervention group (students received the BRISC intervention) or the control group (students received treatment-as-usual [TAU]).

1. PARTICIPATING SCHOOLS, DISTRICTS, AND MENTAL HEALTH AGENCIES

Mental health agencies	BRISC	Treatment-as-usual (TAU)
Guadalupe Alternative Programs (GAP)	Guadalupe Alternative Programs (GAP) School *Saint Paul Public Schools*	
Headway Emotional Health	Andover High School *Anoka-Hennepin*	Blaine High School *Anoka-Hennepin*
	Anoka High School *Anoka-Hennepin*	Champlin High School *Anoka-Hennepin*
	Burnsville High School *Burnsville-Eagan-Savage*	Coon Rapids High School *Anoka-Hennepin*

1. PARTICIPATING SCHOOLS, DISTRICTS, AND MENTAL HEALTH AGENCIES (CONTINUED)

	BRISC	Treatment-as-usual (TAU)
Minneapolis Health Department	Southwest High School *Minneapolis Public Schools* Washburn Senior High *Minneapolis Public Schools*	Edison High School *Minneapolis Public Schools* Patrick Henry High School *Minneapolis Public Schools* Roosevelt Senior High *Minneapolis Public Schools*
People Incorporated		Maple Grove Senior High *Osseo Area Schools* Osseo Senior High *Osseo Area Schools* Robbinsdale Armstrong High School *Robbinsdale Area Schools*
Nystrom & Associates	Richfield High School *Richfield Public Schools*	St. Anthony Village High School *Minneapolis Public Schools*

Students newly referred to school mental health services were invited to enroll in the study, and they were interviewed before their first treatment appointment and four more times over six months. During these interviews, data were collected through several measures, including:

- Student Engagement Inventory: assesses intrinsic motivation; self-efficacy; future aspirations; engagement with school work; and support from teachers, peers, and family members
- Academic Questionnaire: measures the frequency in which youth experience positive school-related events (e.g., received praise from a teacher) and negative school-related events (e.g., missed class)
- Brief Problem Checklist: assesses internalizing and externalizing problems
- Youth Top Problems Assessment: identifies problems of youth that are particularly significant and assesses problem severity
- Generalized Anxiety Disorder (GAD) scale: assesses severity of generalized anxiety symptoms
- Patient Health Questionnaire (PHQ): assesses severity of depressive symptoms
- Service Assessment for Children and Adolescents: assesses youth's utilization of inpatient, outpatient, and school mental health services
- Columbia Impairment Scale: assesses functional impairment
- Therapeutic Alliance Scale for Adolescents: assesses the relationship between youth and clinician
- Multidimensional Adolescent Satisfaction Scale: assesses youth satisfaction regarding clinician qualities, meeting youth's needs, clinician effectiveness, and conflict with clinician

Parents were interviewed three times about their youth, and these interviews covered their youth's functioning and impairment, mental health service utilization, top problems, and internalizing and externalizing behaviors. Data were also collected from clinicians and students' school records. Only data collected from students and clinicians are presented in this brief.

Demographics and characteristics of students

There were 170 youth that participated in the study in Minnesota (Figure 2). Two-thirds of youth identified as female, and about half identified as White or Caucasian. Youth most commonly reported being in 9th grade. Approximately half of students indicated they are eligible for free/reduced lunch. Overall, the BRISC and treatment-as-usual (TAU) groups were similar, with some exceptions. BRISC students were more likely to identify as male, Black or African American, and in 12th grade, while a larger proportion of TAU students identified as Multiracial and in 10th grade.

2. MINNESOTA STUDENT PARTICIPANT DEMOGRAPHICS BY TREATMENT CONDITION (BRISC, TAU)

	BRISC (N=90-95)	TAU (N=73-75)	Total (N=163-170)
Gender			
Male	38%	27%	33%
Female	60%	73%	66%
Endorsed Another Gender	2%	0%	1%
Race			
American Indian or Alaskan Native	2%	3%	2%
Asian or Asian American	3%	3%	3%
Black or African American	21%	12%	17%
Native Hawaiian or Pacific Islander	0%	1%	<1%
White or Caucasian	50%	52%	51%
Latino as race only	12%	8%	10%
Multiracial	11%	19%	14%
Other	2%	1%	2%
Ethnicity			
Latino	25%	20%	23%
Grade			
9th grade	31%	33%	32%
10th grade	22%	31%	26%
11th grade	25%	23%	24%
12th grade	22%	13%	18%
Free/Reduced Lunch Eligible	50%	55%	52%

Key findings

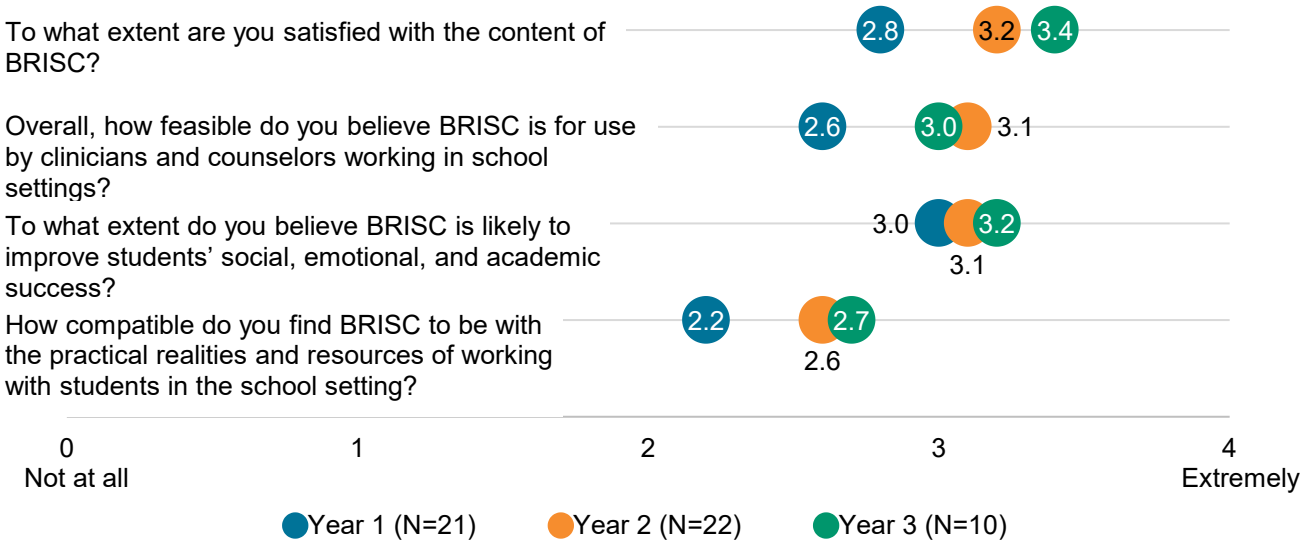
There were several key findings of the BRISC study. Clinicians reported favorable views of the model and described how the model may be useful in addressing student concerns quickly, while still allowing students with higher or more complex needs to continue receiving services. However, clinicians also noted that it may be best suited to students with less complex needs. Both BRISC and TAU students improved over time, with BRISC students demonstrating slightly more favorable outcomes. Students who received the BRISC intervention used fewer services over time, but the reason for this difference is unclear. Students from both groups viewed their clinician favorably, though BRISC students reported lower satisfaction regarding their provider's counselor qualities compared to students who received treatment-as-usual.

Clinicians generally view BRISC positively, but it may be best suited to students with less complex needs.

At the end of each school year, BRISC clinicians from all three sites were asked to assess their satisfaction with the BRISC model across several measures, using a scale of 0 indicating "not at all" and 4 indicating "extremely." Figure 3 presents several selected items and average responses.

Overall, clinicians reported being satisfied with the BRISC intervention, and satisfaction generally increased over time. However, clinician ratings were lowest on items that asked about BRISC's compatibility with the realities of a school setting. The reason for this discrepancy is unclear, but may relate to clinicians' perceptions that the model may be best suited to students with less severe needs.

3. AVERAGE RESPONSES FOR SELECTED ITEMS REGARDING CLINICIAN PERCEPTIONS OF BRISC, ALL MINNESOTA SITES



Clinicians generally view BRISC positively, particularly regarding its strength in helping youth with less serious mental health issues. Clinicians cited the model's problem-solving focus, brevity, structure, client-driven emphasis, and progress monitoring as being especially valuable in helping their clients.

> *It is problem focused and brief, perfect for the school setting.*
>
> *Overall, the problem solving framework was helpful for students to focus on solutions to their problem, increasing [their] sense of agency.*
>
> *I found that BRISC was a great tool to…work with more students for a shorter time frame.*
>
> *It was helpful to break the problems down further into small manageable pieces.*
>
> *I found that clients seemed to be changing behaviors quicker and sometimes were more engaged because they could choose what was most important for them to work on.*
>
> *Trackable, quantifiable progress was a useful tool to represent progress.*

However, clinicians also noted that some students have greater or more complex needs than can be adequately addressed with BRISC alone.

> *I found using the problem solving framework very helpful to help clients get engaged in treatment and start working and seeing results quickly. I found this a little difficult with clients with trauma or more severe mental health concerns.*
>
> *It is a great place to start with a lot of students. For others who are much more acute, it can be a more challenging approach.*
>
> *I found the BRISC to be helpful for students, but often the students I work with need additional work rather than just problem solving skills.*

Both BRISC and TAU students improved over time, with BRISC showing slightly more favorable outcomes at the six month time point.

Overall, both BRISC and TAU students demonstrated statistically significant improvement over time across several measures, including externalizing problems, the severity of their top problems, and anxiety symptoms (Figure 4). While there were no statistically significant differences between TAU and BRISC students on any of the measures at baseline, there were several differences at the six month time point. BRISC students reported slightly fewer externalizing problems; rated the severity of their top problems lower; and reported lower levels of anxiety, depression, and overall impairment. In addition, BRISC students demonstrated faster improvement regarding the severity of their top problems, a statistically significant difference relative to the TAU group.

4. STATISTICALLY SIGNIFICANT OUTCOMES FOR MINNESOTA STUDENT MEASURES

	TAU improved over time	BRISC improved over time	BRISC improved faster	More favorable scores at 6 months for BRISC
Student Engagement Inventory				
Academic Questionnaire (number of days in which a positive event happened)				
Academic Questionnaire (number of days in which a negative event happened)				
Brief Problem Checklist (internalizing problems)				
Brief Problem Checklist (externalizing problems)	■	■		■
Youth Top Problems Assessment (problem severity)	■	■	■	■
Generalized Anxiety Disorder (GAD) scale	■	■		■
Patient Health Questionnaire (PHQ)				■
Columbia Impairment Scale				■

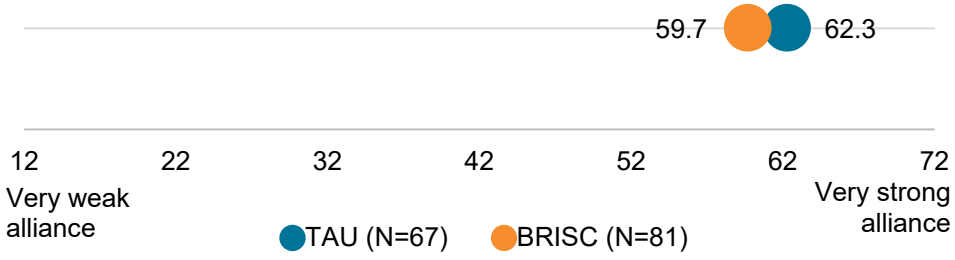
■ Statistically significant change or difference at the .05 level or lower

According to the Service Assessment for Children and Adolescents, BRISC youth also reported receiving fewer services at the six month time point, which may include inpatient, outpatient, and school services. This was a statistically significant difference relative to TAU students. There are several possible interpretations for this difference, including reduced need for services or reduced access to services that are still needed.

Both BRISC and TAU students were satisfied with their clinician and their overall counseling experience.

During the two month interview, students were asked to provide feedback regarding their counseling experience and their relationship with their clinician. Ratings were similar between TAU and BRISC students for most of the measures, and youth reported strong therapeutic relationships with their clinicians (Figure 5).

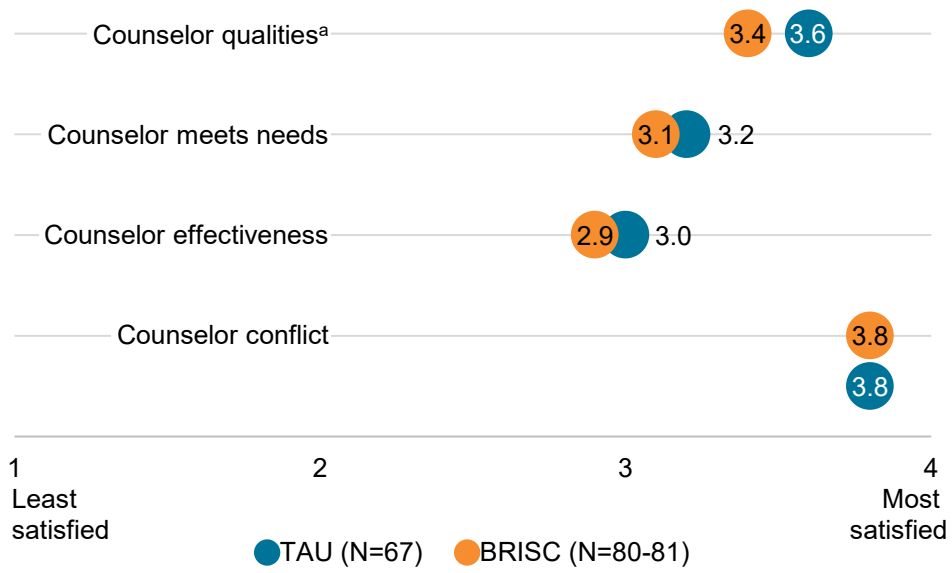
5. MINNESOTA AVERAGE RESPONSES FOR YOUTH PERCEPTIONS OF THE THERAPEUTIC RELATIONSHIP



Note. This figure presents averages for the Therapeutic Alliance Scale for Adolescents.

In addition, students reported relatively high satisfaction regarding their clinician's skills, ability, and characteristics to work with youth (counselor qualities); the extent to which they felt the type and quantity of treatment received was meeting their needs (counselor meets needs); the extent to which they viewed the treatment as effective (counselor effectiveness); and the extent to which they experienced conflict with their clinician (counselor conflict; Figure 6). TAU students rated their providers more highly in counselor qualities than BRISC students did, the only statistically significant difference between the two groups across these measures (Figure 6).

6. MINNESOTA AVERAGE RESPONSES FOR YOUTH SATISFACTION WITH CLINICIAN



Note. This figure presents averages from the four subscales of the Multidimensional Adolescent Satisfaction Scale.

[a] Statistically significant difference between BRISC and TAU

Next steps

Overall, clinicians reported favorable views of the BRISC model, noting that it may be particularly useful for students with fewer or less complex needs and for addressing student concerns quickly. In addition, students from both groups improved over time, with BRISC students showing slightly more favorable outcomes at the six month time point. Lastly, students generally viewed their clinician favorably, though BRISC students were less satisfied with their counselor's qualities than TAU students.

BRISC is a promising intervention for students with mild to moderate impairment and may allow providers to help students more quickly than treatment-as-usual. Because of its utility for students with less complex needs, other school staff may find the model useful in their work, such as academic counselors, support staff, or social workers. In the future, BRISC trainings may be offered in Minnesota in-person and/or through online modules.

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