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Schoolwide Positive Behavior Support for Mental Health (SESAME)

First Conceptualization of the SESAME model

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Content

Introductory remarks

The following model represents a conceptualization of the American framework School-wide Positive Behavior Support (SW-PBS) for mental health focusing on the prevention and intervention of internalizing behavior disorders, such as anxiety or depression, in secondary school students. It was developed as part of the Erasmus+ funded project "School-wide Positive Behavior Support for Mental Health (SESAME)". In SESAME, the focus will be on the following goals:

1. Development, implementation, and first evaluation of a SW-PBS approach to prevent internalizing behavior disorders in secondary school students (SESAME model)
2. Development, implementation, and first evaluation of a training pathway for educators to use the SESAME model developed in 1).
3. Development of a SESAME App to digitally support the use of SW-PBS tools and to increase the usage of the SESAME model by teachers, and students.

SESAME will be implemented in four European countries: in France, Germany, Italy, and Portugal. The project language is English, but all materials will be provided in each country's primary language.

The primary intention of this model is to provide a SW-PBS framework that will lead the upcoming project activities. Therefore, the here presented SW-PBS model requires to be usable in the four aforementioned European contexts.

The following model includes SW-PBS strategies on the student level (i. e., assessment and intervention tools), the teacher level (i. e., teacher training), and the school-wide system level (i.e., school climate assessment and intervention).

The following criteria were applied to decide what tools will be included in the model:
- The strategies are evidence-based.
- The strategies focus on internalizing behavior problems or disorders in secondary school students.
- The strategies are usable in diverse European contexts, i. e. the required materials exist in English, French, German, Italian, and the Portuguese language.

For a basic understanding of the contents presented below, the entire document should be read. The main text provides an insight into all the actions undertaken under SESAME. The annexes then provide a more detailed description of the methods described and how they are implemented.

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Tier 3

intervention

- function-based behavior
interventions

assessment

- functional behavior analysis
- Direct Behavior Ratings (DBR)

System level 3

- Building a Multi-Disciplinary Team
- Collecting Fidelity Data

Tier 2

intervention

- individualized training of behavior expectations
using Daily Behavior Report Cards intervention

assessment

- assessing students behavioral progress using Direct Behavior Ratings (DBR)

System level 2

- Building an Intervention Team with Coordinator
- Collecting Fidelity Data

Tier 1

intervention

- teaching clear behavior expectations on the classroom level using the Good Behavior Game

assessment

- assessing internalizing behavior problems using a universal screening tool (ITRF)

System level 1

- Building a Leadership Team
- Assessment of School Climate
- Developing strategies for sustainable Home-School-Collaboration

Developed by authors, based on Sugai & Horner, 2006

Description of the SESAME model components

<u>Tier 1:</u>

Creating a safe learning environment and viable student-teacher-interactions through clear behavioral expectations taught by Classroom Management

On Tier 1, shared values and behavioral expectations will be developed. The shared values should represent common attitudes regarding the behavior of all persons interacting in schools (i.e., teachers, students, principal, other personnel, parents). The overwhelming goals of Tier 1 intervention are to create a safe learning environment for the students and to foster positive student-teacher-interactions. Based on common values, clear behavior expectations with a focus on internalizing behaviors will be defined. An expectation matrix including the behavioral expectations will be developed. The formulation of the values and the development of the expectation matrix will be coordinated by the Leadership Team.

To effectively teach the behavioral expectations in the classroom, the teachers will use classroom management strategies. Classroom Management (CM) is defined as

"the actions teachers take to create an environment that supports and facilitates both academic and social-emotional learning. In other words, classroom management has two distinct purposes: It not only seeks to establish and sustain an orderly environment so students can engage in meaningful academic learning, it also aims to enhance students' social and moral growth. From this perspective, how a teacher achieves order is as important as whether a teacher achieves order." (Evertson & Weinstein, 2006, p. 4).

Greenberg, Putman, & Walsh (2014, p. 3) structure classroom management in primary and secondary strategies. Primary strategies are strongly evidence-based. Greenberg et al. (2015) propose the so-called "Big 5 of CM":

1. Rules, i.e., developing positively stated behavior expectations
2. Routines, i.e., teaching of specific guidelines how to act in a variety of situations
3. Praise, i.e., positively reinforcing positive behavior
4. Misbehavior, i.e., determining and applying consequences for noncompliance
5. Engagement, i.e., engaging students in the lessons

In addition, Greenberg et al. define secondary CM strategies, which are not strongly evidence-based, but also very important in creating safe learning environments:

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1. Management of the physical classroom
2. Motivation of students
3. Use of the least intrusive means
4. Involvement of parents and school, community
5. Attendance to social/cultural/emotional factors that affect the classroom's social climate.

In SESAME, the teachers will use a variety of methods to realize these strategies in their classroom. As an example, the classroom rules – based on the school-wide behavior expectations - will be closely linked to the internalizing behavioral dimension using the results from the universal behavior screening (the Integrated Teacher Report Form, see below). The rules should be a) clear and concise, and b) commonly developed by teacher and students. We recommend not to exceed a number of five rules.

Another potential tier 1 intervention might be the Good Behavior Game (GBG, Barrish, Saunders, & Wolff, 1969). The GBG is evidence-based, since preliminary studies showed that it a) can effectively increase desirable classroom behaviors, and b) effectively reduces problematic classroom behaviors. The GBG is played with the entire classroom, so it is very suitable for Tier 1. The GBG is an easy-to-use and time-efficient interdependent group contingency intervention utilizing students' mutual dependence to reach behavioral targets. Specifically, students of a pre-determined group receive rewards for reaching a criterion for appropriate behavior. The main features of this game are easily comprehensible:

(1) selection of goals and rules
(2) recording of rule violations
(3) explaining the rules of the games and determining rewards
(4) dividing the students in two or more teams to play against each other
(5) playing the GBG for a specified game time

In the GBG, the students in the classroom are organized in different teams. These teams play against in showing the best classroom behavior (i.e., following the determined classroom rules). A team receives a mark ("foul") when a team member breaks a rule. At the end of the game, the team with the fewest fouls wins. The GBG was originally developed to reduce disruptive behaviors, but it is also used to improve prosocial, cooperative, and academic behaviors.

Integrated Teacher Report Form (ITRF; Volpe & Fabiano, 2013)

The Integrated Teacher Report Form (ITRF) is part of a multi-gated screening procedure for childhood internalizing problems that was developed in the United States. The system was designed to address common barriers to the use of school-based universal screening procedures including the amount of time needed to complete the screening process and the limited degree to which screening data are used in the design interventions. Cook, Volpe, and Livanis (2010) referred to this latter concern as the "silo problem." The silo problem is that assessments for screening and assessments for treatment planning typically are distinct and

separate assessment tasks. Using the ITRF, teachers can screen a classroom of 30 students in between 5 and 10 minutes (Daniels, Volpe, Briesch, & Fabiano, 2014). The procedure involves teachers nominating five students of concern, and those students are subsequently rated on each ITRF item based on the degree of teacher concern with the problem behavior (0 = Not a Concern, 1 = Slight Concern, 2 = Moderate Concern, 3 = Strong Concern; Volpe & Fabiano, 2013). Resultant scores are used to: (a) quantify the level of risk for each rated student, (b) rank order the level of risk for students within classrooms, and (c) rank order behaviors of concern to aid in the selection of specific target behaviors for intervention. The ITRF is part of a broader assessment and intervention system wherein each identified problem behavior is linked to a target for classroom-based interventions that can be delivered by a general education teacher (the Daily Behavior Report Card Intervention; see Volpe & Fabiano, 2013 and the description below).

The ITRF measures both externalizing (i.e., oppositional/defiant behavior, academic productivity problems), and internalizing behaviors (anxious/depressed behavior, social withdrawal). In the SESAME model, only the version for internalizing behavior problems will be used. The ITRF for internalizing behavior comprises of 24 items representing internalizing behavior problems commonly observed in classroom settings. These items load on two factors: anxious and depressed behavior (e. g. "Makes self-deprecating comments"), and social withdrawal (e.g., "Avoids group interactions"). Initial psychometric analyses support the two-factor structure of the ITRF (Volpe et al., in press). Different indices for internal consistency are above .90, which indicates an excellent reliability of the ITRF. The ITRF exists in English, French, German, Italian, and Portuguese language.

In the SESAME model, the ITRF will be used as a universal screening tool to identify those students who do not benefit from the tier 1 intervention. Students, who are positively screened on the ITRF will be involved in a targeted and peer-based group intervention focusing on individualized behavior problems on tier 2. The teachers should screen all students of their classroom twice within six months to ensure that every student with additional needs will be identified.

The interpretation of the ITRF results is comparatively easy. First, the sum scores will be calculated for each scale (i.e., anxious/depressive behavior, social withdrawal) and for both scales together. Second, students will be rank-ordered in regard to their ITRF sum score. Depending on the individual student group, the sum scores for a sub-scale or for both scales together can be used to rank-order students. Finally – based on the rank-order – the teacher has to decide, which students should be targeted with Tier 2 interventions. In addition, the ITRF scores can be used as a formative measure to evaluate the internalizing classroom behavior before and after an intervention.

Leadership Team

On tier 1, leadership teams will be established on the school level. These teams are responsible for the successful implementation of the strategies and practices for tier 1 support. That is, monitoring of school-wide data, ensuring students receive equitable access to these supports, and evaluating the program's overall effectiveness. The leadership team should be representative for all school personnel involved in behavior interventions. The team should have behavioral expertise, coaching expertise, knowledge

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of student academic and behavior patterns, and knowledge about how the school operates across grade levels and programs. We recommend to include at least the following expertise:

- A SW-PBS expert, who is familiar with the approach, the strategies, systems, and tools. In SESAME, this will be the colleagues trained by the scientific experts in SW-PBS in the Train-the-Trainer event in Portugal. This person coordinates the team.
- A representative of the school administration
- A proponent of the SW-PBS approach from the teaching personnel
- A teacher, who is critical towards the SW-PBS approach
- A representative of the students
- A representative of family/ parents
- A representative of the group of non-teaching personnel

The Leadership Team will meet on a regular basis (i.e., every two weeks for one hour). They will work out a commitment statement for establishing a positive school-wide social culture. In addition, the Leadership Team will be responsible for collecting schoolwide data used for decision-making processes (i. e., school climate, information about home-school-collaboration). Finally, the Leadership team will be responsible to work out a professional development plan, and an evaluation plan to assess the personnel's development.

In the Leadership Team, one of the major responsibilities of the SESAME project team representative is, to recommend questionnaires for data collection. In this context, a School Climate Survey will be provided (The Georgia School Climate Survey; LaSalle and Colleagues, 2020). This survey exists in different languages, and can be completed by personnel, students, and parents.

Tier 2:

Peer-based Daily Behavior Report Cards

In SESAME, a targeted and peer-based Daily Behavior Report Cards (DBRC; Volpe & Fabiano, 2013) intervention will be provided for those students, who were positively screened on Tier 1. In its original conceptualization, DBRC represent an individualized behavior intervention for tier 2 support. A DBRC is a simple card, on which individualized target behaviors are presented. The behavior targets refer to specific classroom situations (e.g., independent seatwork), and every day it is checked if the students has met his behavior goals or not. If the student successfully reached his behavior targets, a reward is provided.

The DBRC intervention efficacy is based on two important pillars: first, the teacher's feedback is important for student's success. This means, the teacher needs to feed up before the intervention starts (i.e., a reminder of the relevant behavior goals, and what is meant by showing the appropriate behaviors), to feed back within the classroom situation, and to feed forward after the

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behavior was evaluated. Second, the parents can be involved in the intervention. For instance, if a student showed positive behaviors in the classroom, the reward will be given at home (e.g., extra computer time, dinner at a restaurant).

In the SESAME model, we modify the original DBRC intervention to a peer-based targeted intervention. That means, the evaluation of the behavioral outcomes, the feedback, and the reward will not be provided by the teacher, but by a group of peers. Therefore, the students take responsibility for their own behavioral development. At the end of each school day, a group of students will meet for 30 – 45 minutes, and based on the DBRC, the school-wide expectations matrix, and the classroom rules, the students' behavior will be discussed, feedbacked, and rewarded. The group should ideally consist of 3 to 6 pupils and can be either heterogeneous (pupils at all tiers) or homogeneous (only pupils at tier 2). The peer meetings will follow a ritualized procedure (i.e., Welcoming, Round of behavior reflection of each participant, Evaluation of and feedback for the behavior goals, reward, conclusion & outlook), and they will be held in a trustful and appreciating atmosphere.

The DBRC intervention is closely linked to the ITRF, the universal screening tool on tier 1. That is, the results from the screening tool will be used to identify those problem behaviors that are of the strongest concern. A conversion table, which is part of the intervention system, can be used to convert the problem behaviors of the ITRF to positively worded behavior targets for the DBRC intervention. Each teacher will get a guideline on a) how to implement the DBRC in the classroom, and b) how to prepare the students for the group meetings. In the group meetings themselves, the teacher involvement should be as low as possible, and can successively shut down.

Several studies support the effectiveness of the DBRC intervention. Systematic reviews and meta-analyses have shown that DBRC can effectively increase prosocial and cooperative behaviors. Furthermore, Check-and-Connect (e.g. Anderson et al., 2004), an intervention that is very comparable to the DBRC, is considered as one of the most evidence-based interventions for students with internalizing behavior problems.

Direct Behavior Ratings

On tier 2, the behavioral progress will be tracked through progress monitoring tools. These tools are assessment procedures that are used with a high frequency (e.g., every day) to assess a student's response to behavioral intervention.

Direct Behavior Rating (DBR) represents a well-established tool for behavioral progress monitoring (Christ, Riley-Tillman, & Chafouleas, 2009). DBR combines the advantages of systematic direct observation and behavior rating scales by asking educators to rate student behavior in a specific situation immediately after an observation session. In recent years, two broad methods of DBR have been developed and evaluated for progress-monitoring purposes: Single-Item Scales (DBR-SIS) and Multi-Item Scales (DBR-MIS). DBR-SIS typically target behavioral domains (i.e., academically engaged, disruptive behavior) and may be efficient indicators of these broad domains. However, DBR-SIS have typically not been used to assess specific classroom behaviors that might be particularly informative for evaluating a student's response to behavioral intervention (e.g., raising hand, out of seat). In contrast, DBR-MIS, like traditional rating scales, usually include three to five specific items (e.g., completes classwork in allowed time, starts work independently) that serve as indicators of a behavioral domain (e.g., academic engagement). These more specific

items can therefore be analyzed individually or their raw scores can be summed to generate a composite score (Volpe & Briesch, 2012, 2015).

In the SESAME model DBR-MIS focusing on internalizing behaviors will be used. The target behavior will be generated from the ITRF results, and a number of items (i.e., 3 – 5) will be provided on the DBR. The DBR should be completed twice a day. The data will be used to regularly progress the students' behavioral progress.

Intervention Team with Coordinator

On tier 2, an intervention team including a coordinator will be established. The main responsibilities of the Intervention Team are a) ensure the provision of the behavior interventions, b) monitor the implementation of the interventions, and c) check the students' behavioral progress using the data from the DBR.

The members of the Intervention Team should have expertise in behavior management, and data-use for decision-making. One main responsibility is to coach the colleagues in the PBS strategies. Therefore, the team should be able

- to understand and review data
- to encourage, teach, prompt, provide practice, and model for school personnel
- to communicate with stakeholders
- to distribute information and gathering input
- to organize and promote professional learning.

We recommend at least the following persons to include in the intervention team:
- A coordinator with high expertise in behavior management, assessment, and data-use for decision-making;
- A School Administrator
- A Behavior Specialist
- A Classroom Teacher·

The intervention team will meet on a regular basis. In addition, the intervention team will serve as a consultation address for colleagues, who need support in the implementation of the SESAME practices. The team will analyze, interpret, and communicate behavioral progress data from the DBR. In addition, they will collect intervention fidelity assessment data using standardized checklists.

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<u>Tier 3:</u>

Functional Behavior Assessment

A Functional Behavior Assessment (FBA) is a process that identifies specific target behavior, the purpose of the behavior, and what factors maintain the behavior that is interfering with the student's educational progress. This process leads to development of intervention plans to teach acceptable alternative behavior. The resulting intervention plan focuses on teaching new behavior and social skills but usually also requires modification of the school or classroom environment and activities, adaptation of curriculum and instructional delivery, and changes in the teacher/student relationship that maintain the undesirable behavior.

FBA usually consists of four phases (Ervin et al., 2001): (1) collect behavioral data, (2) develop hypotheses about the function of the behavior, (3) formally test of the developed hypotheses, and (4) develop interventions based on tested hypotheses. FBA generally describes a process of systematically manipulating environmental factors to test behavioral hypotheses (Cone, 1997). This manipulation is based on the three most common reinforcement categories: positive reinforcement (e.g., attention), negative reinforcement (e.g., escape from academic or social demands), and sensory reinforcement (e.g., play). In FBA, these conditions are experimental manipulated, and the condition that shows the highest frequency/duration of the behavior represents the primary maintaining variable (e.g., Solnick & Ardoin, 2010). One identified, the maintaining condition is addressed by an intervention.

In the SESAME model, the problematic target behaviors have already been identified by the ITRF. On tier 3, the main purpose of the FBA is to identify the function of the problematic behaviors, and how these functions can be addressed by intervention practices. Therefore, standardized FBA measures in each country context will be identified to measure the symptoms of internalizing behaviors and the related functions (e.g., systematic direct observation). In SESAME, a guideline for teachers will be developed that could be applied to successively test hypotheses about the function of behavior. This guideline will be based on basic principles of experimental single case research. The FBA will be conducted for those students, who do not benefit adequately from the tier 2 interventions.

Function-based Behavior Interventions

Function-Based Intervention is an action plan that is developed by taking into consideration the information obtained from the Functional Behavior Assessment (FBA) and must address the purpose that the behavior serves for the child. The general goal of the Function Based Intervention is to have the child gain access to the same reinforcement that was maintaining the inappropriate behavior but now have it maintain alternative appropriate behaviors. In addition, the intervention must reduce or eliminate the reinforcement obtained when the child exhibits the inappropriate behavior.

The functions for internalizing behavior problems can be very different from case to case. Therefore, in the SESAME model, different function-based behavior interventions will be implemented. The first approach will be to provide the DBRC intervention

with more intensity, and with a focus on those factors that cause the behavior problems. The second approach will be a cognitive-behavioral therapy (CBT) approach that teaches, practices, and reinforces adequate positive behaviors. An example: If a pupil is too shy to play with his/her classmates during the break, he/she will be taught a method to actively approach his/her classmates. If this pupil succeeds in interacting with his classmates, he will be rewarded/enhanced accordingly.

Direct Behavior Ratings

On tier 3, the DBR-MIS will be used with higher frequency. Furthermore, the items will be modified according the results from the FBA, and the selected intervention. The items on the DBR-MIS should be closely linked to the behaviors targeted in the intervention.

Multidisciplinary Team

On tier 3, a multidisciplinary team will be established. This team ideally includes the following professionals:

- A school administrator
- a coach/behavior representative
- others with basic knowledge of problem solving
- a person with expertise in functional behavior analyses
- a person that knows the students on tier 3

In addition to the multidisciplinary team, it can be efficient to establish tier 3 support teams, which represent a team focusing collaboratively on the intervention of 1-2 tier 3 students.

On tier 3, the teams collect fidelity assessment data, behavioral progress data, and student and teacher outcome data.

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