**Data Collection Glossary of Terms**

**Confidence interval:** In social sciences, measuring attitudes and behaviors is challenging to do precisely. We know that in many cases we cannot be accurate 100% the time. So, we use confidence intervals to provide us with a range of values that likely include the most accurate estimate.

Typically, the "confidence" level is set to be 95%. This means that if we took many measurements over and over again, 95% of the time our estimated range would include the correct number. The "interval" is often expressed as a value with a +/- in front of it (+/- 3.0%), and using this number, we can calculate the low and high end of the estimated range.

So, if our estimate of drug use prevalence is 50% (+/- 3.0%) we subtract 3.0% from 50% to establish the lower end of the range. This equals 47%. We then add 3.0% to 50% to establish the high end of the range. This equals 53%. So our full range is 47-53% and we can be confident that if we took many measurements then 95% of the time this range would include the correct number.

**Indexes/Indices**: A numerical scale used to compare variables with one another or with some reference number

**Mean:** The mathematical average of all data values within a specified set (sum of the values/the number of values)

**Median:** The value halfway through the ordered data set below and above which there lies an equal number of data values

**Mode:** The most frequently occurring value in a set of data

**Percentage:** A proportion in relation to a whole; way of expressing a number as a fraction of 100 (45/100 = 45%)

**Range:** Spread or the dispersion of the data points, difference between the largest and the smallest observed value

**Rank:** Status relative to others; relationship between a set of items such that, for any two items for example, the first is either 'ranked higher than', 'ranked lower than' or 'ranked equal to' the second

**Rate:** A quantity or amount or measure considered as a proportion of another quantity or amount or measure; "the literacy rate"; "the retention rate"; "the dropout rate"

**Quartiles:** Values that divide a sample of data into four groups containing (as far as possible) equal numbers of observations

**Scale score:** A "scale" is made up of a group of questions that asks about a certain topic. For example, the "low neighborhood attachment" scale consists of 3 different questions that ask about feelings and attitudes towards the neighborhood. Each question has a score. A scale score is a summary of score of all of the questions for that scale. Typically, scale scores represent an average of all answers to the scale questions or a simple sum of the question scores. So, the scale score for the low neighborhood attachment scale would be an average or sum of the 3 items in that scale

Once all scores from all respondents have been calculated, the "normative" score is calculated. This normative score represents the median score - where 50% of scores are higher than the normative score, and 50% are lower than the normative score. Said another way, half of the group had a higher score, and have had a lower score

**Total:** A quantity obtained by the addition of a group of numbers

**Trend:** Underlying direction (an upward or downward tendency)

**General Glossary of Terms**

**Adaptation** Any change or modification made to an evidence-based program that alters how the program was designed to be implemented.

**Adjudication** To hear and settle a case by judicial procedure.

**Attrition** A gradual decrease in number or research participants who withdraw or are removed from a research study prior to its completion.

**Buffer** To insulate youth against risk factors and delay the onset of or prevent negative outcomes and problem behaviors.

**Buy-in** To create an understanding and excitement for the importance of an initiative in a community before and during implementation by those who are coordinating and delivering the program and those who will be responsible for funding and sustaining the program.

**Community coalition/**

**Community collaborative** A broad-based group of people from many facets of the community, such as law enforcement, school administrators and personnel, health and human service providers, business leaders, the faith community, county agencies, and others who come together to plan and implement evidence-based programs for the community.

**Community gatekeeper/**

**Community Champion** A community member that is enmeshed in the local culture, such as a trusted school official, a community elder, or a minister. They can help to counter distrust and promote referrals and registrations for evidence-based programs by articulating the value and potential impact of the program for the local community.

**Community norms** The commonly accepted behaviors and beliefs of a given community.

**Community risk factors** Characteristics of a community that are known to predict an increased likelihood of negative youth outcomes and problem behaviors, like substance use, delinquency, school dropout, teen pregnancy, violence, and depression and anxiety.

**Community-based program** One type of evidence-based program that targets a selected community (e.g., grassroots efforts, efforts by a local civic group, or a specific population within a community).

**Comparison/Control Group** A group of individuals that is not exposed to the evidence-based program under evaluation and is used to determine the effectiveness of a particular intervention. By comparing the outcomes of those individuals in the control group to those in the intervention group (who received the program), researchers can attribute more confidently any changes in the intervention group to the effects of the program.

**Cost analysis** The most basic type of economic analysis. It is the systematic collection, categorization, and analysis of all the costs associated with an intervention/prevention program.

**Cost -benefit analysis** An economic analysis that determines if the economic benefits associated with the implementation of an evidence-based program equal and/or exceeds the costs associated with the implementation of that program.

**Demonstrated effectiveness** To show through scientifically rigorous evaluation studies that a program is having an intended or expected positive effect on the targeted outcomes.

**Deterrent effect** The impact of an evidence-based program on preventing or discouraging the occurrence of problem behaviors in youth.

**Didactic** Involving lecture and textbook instruction rather than demonstration or participatory learning.

**Dissemination** Wide-scale distribution, such as proliferation of an evidence-based program in real-world service systems and communities.

**Distal outcomes** Behavioral outcomes that an intervention/prevention program is designed to impact at long term follow-up.

**Domain** Spheres of influence in which risk and protective factors operate and prevention activities can have an impact. Domains are usually considered to include individuals (self and peers), school, workplace, family, community, and society.

**Effect** The change in an outcome that results from an evidence-based program.

**Effects size** A statistical measure of the strength of relationship between two variables. An effect size is calculated to indicate the impact of a program in standard units. The larger the effect size the greater the program’s impact on youth outcomes. When evaluating programs, it is often suggested that an effect size (or d) of 0.2 is a small effect, 0.5 a moderate effect and 0.8 a large effect. The effect sizes are based on standard units derived from the mean and standard deviations. A small effect size (of say d = 0.1) does not necessarily mean an unimportant effect. Many prevention and early intervention programs demonstrate only small or moderate effects.

**Effectiveness** A measure of the ability of an evidence-based program to produce a specific desired effect or result that can be qualitatively measured.

**Efficacy** The impact of a program under ideal, highly controlled research conditions. Efficacy indicates the capacity for beneficial change from a given evidence-based program.

**Epidemiology** The scientific study of factors that influence the health and illness of populations.

**Evidence-based practice** Utilizing researched outcomes to guide the selection and implementation of evidence-based programs with an emphasis on impacting change through programs and policies that have strong scientific validation that they are effective, efficacious, and cost-effective.

**Evidence-based program** A program that meets certain rigorous criteria including effectiveness demonstrated in scientific evaluations through randomized controlled trials or quasi-experimental design; large longitudinal studies or multiple replications (results that demonstrate the generalizability to diverse populations); and significant and sustained effects on targeted outcomes. The effects have to be large enough to reasonably expect that the program could result in changes at the population level. In addition, results must be sustained beyond immediate post-intervention in order to change outcomes long-term.

**Experimental design** A type of evaluation research design in which participants are randomly assigned to either receive the intervention program or not.

**Family risk factors** Characteristics of a family that are known to predict increased likelihood of negative outcomes and problem behaviors, such as substance use, delinquency, school dropout, teen pregnancy, violence, and depression and anxiety.

**Fee for service** The amount of money charged to participate in an evidence-based program.

**Fidelity/Model Adherence** The degree to which an evidence-based program is delivered as designed by the developer.

**Generalizability** The ability to use an evidence-based program in a real world setting. The degree to which the program achieves similar outcomes across diverse settings and populations”.

**Iatrogenic effect** A potentially negative or adverse effect caused by an evidence-based program.

**Implementation** Execution of an evidence-based program using the design and curriculum materials created by the developer. Delivery as intended by the developer increases the likelihood of the program’s impact.

**Individual/Peer Risk factors** Characteristics of an individual or peer that are known to predict increased likelihood of negative outcomes or problem behaviors, such as substance use, delinquency, school dropout, teen pregnancy, violence and depression and anxiety.

**Initiation** The time at which a youth begins a negative behavior such as alcohol or drug use.

**Logic model** A logic model is a way to visually represent the underlying rationale for the proven behavioral changes of an evidence-based program. A logic model explains the theory of change or how and why a proven program will work.

**Longitudinal study** The study of a group of individuals at regular intervals over a relatively long period of time.

**Mediating factors** The mechanisms that help explain an observed relationship between an independent variable (predictor) and a dependent variable (outcome). In the case of mediation, the independent variable causes the mediator variable, which in turn causes the dependent variable. For instance, in the context of prevention, an evaluation study may show that a drug prevention program (predictor) has a positive impact on youth binge drinking (outcome). One mechanism which may help explain this relationship is improved drug resistance skills. In other words, the prevention program improves their ability to resist drug offers which in turns leads to reductions in binge drinking. Evaluation research studies that help identify mediating factors for specific programs help us understand not only if a program works but *how* it works.

**Medical Assistance** The government entity that purchases services through contracts with managed-care organizations and under an indemnity, or traditional, fee-for-service system. A medical provider is required to enroll in the program and must meet applicable national, federal and state licensing and credential requirements.

**Model Adherence/Fidelity** The degree to which an evidence-based program is delivered as designed by the developer.

**Needs assessment** A systematic process to acquire an accurate, thorough picture of a system or community’s strengths and weaknesses, in order to improve it and meet existing and future challenges.

**Normlessness** A state in which there are no established norms or values on which people can base moral action or choices.

**Outcome measure** Assessed targets aimed at demonstrating the effect or results of services provided to a defined population through a prevention program. Outcomes measures can include assessments of changes in targeted knowledge, attitudes, skills, and behaviors.

**Outcomes** The results of a particular evidence-based program. Typically this includes changes in targeted knowledge, attitudes, skills, behaviors, or conditions that occur between the start of a program and subsequent points of measurement. Depending on the nature of the evidence-based program and the theory of change guiding it, changes can occur during the program’s implementation, immediately following the program’s completion, and/or several months or years following the program’s completion.

**Performance measure** An established number (magnitude/how much) and unit of measure (what) associated with a goal or objective (the target) that assures accountability of state grant funds and provides information about a program’s impact and implementation quality. Performance measures can be represented by single dimensional units like hours, meters, nanoseconds, dollars, number of reports, number of errors, or length of time, etc.

**Process measure** Process measures describe inputs to the delivery of an intervention/prevention program. They do not measure outcomes, but rather factors related to implementation of an evidence-based program, such as dosage, and staffing.

**Program champion** A person in the community who embraces evidence-based programming and communicates the importance and need for it in their community.

**Program drift** Straying away from the mission, goals, or model adherence of an organization or a program.

**Protective factor** A characteristic of an individual, family, peer-group, school, or community that reduces the impact of risk factors on negative outcomes and is associated with lowering the likelihood of problem behaviors. Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors.

**Proximal outcomes** The results of a particular evidence-based program that occur immediately following the program’s completion.

**Qualitative data** Information gathered in the context of a research study or program evaluation that is descriptive but not quantified for statistical analysis, such as participant testimonials.

**Quantitative data** Information gathered in the context of a research study or program evaluation that is quantified using numbers and frequencies for statistical analysis.

**Quasi-experimental study design** A type of experimental design in which subjects are not randomly assigned to experimental or control groups.

**Randomized controlled trials** A type of experimental design in which participants (individuals, families, classrooms, schools, communities) are randomly assigned to either receive or not receive the intervention and includes observations of both groups, both prior to and after program implementation to determine a program’s impact. In theory, because the groups are randomly assigned, they should not differ in any way except that one group received the intervention and the other did not. Because this design results in equivalent groups, it is considered the “gold standard” for determining the causal effects of a program.

**Referral source** An agency or organization that works with a population targeted by an evidence-based program and is willing and/or able to refer their target population to the evidence-based program to receive its services.

**Replication** The process of reproducing or duplicating the evaluation design and results of a particular program evaluation by someone other than the program’s developer (i.e., an independent researcher).

**Resilient** The ability to recover from or adapt to adverse events, life changes, and/or life stressors despite exposure to factors that put an individual at risk for poor outcomes.

**Risk factors** Characteristics of an individual, family, peer-group, school, or community that precedes and is associated with a higher likelihood of negative outcomes and problem behaviors.

**School risk factors** Characteristics of a school that are known to predict increased likelihood of negative outcomes or problem behaviors, such as substance use, delinquency, school dropout, teen pregnancy, violence and depression and anxiety.

**School-based intervention** An evidence-based program selected for and conducted within a school environment.

**Stakeholder** A person who has a vested interest in the activities, outcomes, and sustainability of an evidence-based program.

**Sustain/Sustainability** The likelihood that a program will continue after grant funds for initial start up and implementation are no longer available.

**Target population** The group of individuals to which a given an evidence-based program is directed.

**Theory of change** A well-substantiated explanation based on past research and existing knowledge of how and why the program produces changes in the targeted outcomes.

**Universal prevention programs** Evidence-based programs that address the general public or a segment of the entire population with an average probability of developing the targeted problem.

**Validity** The extent to which a measure of a particular construct/concept actually measures what it purports to measure.

**Sources used to create the Glossary**

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