

Outcome Research Coding Protocol  
Coding Studies and Rating the Level of Evidence for the  
Causal Effect of an Intervention

National Panel for Evidence-Based School Counseling

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School counseling interventions will be evaluated by the Evidence-Based Practice Panel to determine the level of evidence that exists in outcome studies that supports the contention that the intervention causes a change in an important student outcome. The following seven domains will be used in this evaluation. Each domain has threshold criteria for two levels of strength: Strong Evidence and Promising Evidence. To be considered an Evidence-Based Practice, an intervention must exceed the Strong Evidence threshold in all seven areas. To be considered Promising Practice, an intervention must exceed Promising Evidence threshold in all seven areas.

Three Panel Members will independently review the outcome research related to a given intervention and independently rate each intervention on all seven criteria. Consensus in ratings will be achieved through consultation. The panel will disseminate its overall rating and, in cases where interventions fail to achieve Evidence-Based Practice or Promising Practice status, an analysis of deficiencies in the evidence base will be offered.

The seven domains and criteria are included below:

### **Domain 1. Measurement**

*Principle:* Important academic, career and/or personal/social outcomes are measured using reliable and valid instruments.

*Strong Evidence:*

1. Outcomes measures have established high reliability and validity characteristics.
2. Outcome measures are established to be appropriate for the population under study.

*Promising Evidence:*

Outcome measures have been used in previous studies,

1. Reliability characteristics are evaluated in the study and show adequate reliability.
2. Logical argument supports the appropriateness of the measures for the population under study.

### **Domain 2. Comparison Groups**

*Principle:* Comparison groups with adequate controls are included so that resulting group differences can be attributed to the intervention.

*Strong Evidence:*

1. Active Comparison Groups (alternative treatment) with Adequate Controls (attention, placebo) are included in an outcome study.
2. Initial Group Equivalence is assured through random assignment.
3. Group Equivalence in Mortality/Attrition is established.

*Promising Evidence:*

1. Groups equated through matching or statistical procedures (e.g. ANCOVA) or strong pre-post-test designs are used with adequate controls.

### **Domain 3. Statistical Analyses of Outcome Variables**

*Principle:* Statistical analysis documents low probability of Type 1 error and potency of intervention.

*Strong Evidence:*

1. Statistically significant finding using appropriate test.
2. Control for Experiment-wise error rate.
3. Adequate N.
4. At least a Moderate Effect size for critical outcome variables.

*Promising Evidence:*

1. Statistically significant finding using appropriate test.
2. Control for Experiment-wise error rate.
3. Adequate N.
4. At least a Small Effect size for critical outcome variables.

### **Domain 4. Implementation Fidelity**

*Principle:* Intervention can be delivered with fidelity across contexts and is not contaminated by implementer.

*Strong Evidence:*

1. Intervention is extensively documented (manual or protocol) so that it can be reliably replicated.
2. Intervention is delivered by multiple people with adequate training and checks for adherence to protocol.

*Promising Evidence:*

1. Intervention is standardized and can be delivered across contexts.

2. Intervention is delivered by multiple people with adequate training.

### **Domain 5. Replication**

*Principle:* The same intervention independently implemented with an equivalent population results in equivalent outcomes.

*Strong Evidence:*

1. Independent evaluators find equivalent outcomes with a similar population.

*Promising Evidence:*

1. Same evaluator finds equivalent outcomes with same population

### **Domain 6. Ecological Validity**

*Principle:* The intervention can be implemented effectively in a public school with consistent effects across all student subgroups or with known differences between student subgroups. Limitations of the generalizability of results are clearly explicated.

*Strong Evidence:*

1. Study conducted in a diverse public school.
2. Outcomes are assessed across different subgroups of students or clearly specified as valid for a specific subgroup.

*Promising Evidence:*

1. Study conducted in a private, laboratory, or charter school or in a public school with limited diversity.

### **Domain 7. Persistence of Effect**

*Principle:* The intervention results in a lasting effect on an important outcome measure.

*Strong Evidence:*

1. Treatment-Comparison group differences are demonstrated to persist for a practically significant time period.

*Promising Evidence:*

1. Treatment-Comparison Group Differences are demonstrated to persist beyond the immediate implementation.