**Tables Handout**

**An Evaluation of the Dynamical Effects of an Out-of-School-Time Program**

**“Digging Deeper” (Slide 6) Points 1 and 2: Program impacts were not constant over the life of the program but can be improved through process evaluation and program management. In addition, a failure to take into account randomness (including unreliability) in measurement will lead to the mis-estimation of program effects.**

Randomness in measurement (including unreliability) is a major problem, especially in dealing with over time data (such as panel data) on the same program participants. After all, observed change may be entirely due to flawed (especially randomness in) measurement rather than to true alterations in participants behavior, knowledge, attitudes, or skills.

In the first table immediately below, the relationships between the amount of program participation and school absences (the “dose-response relationship”) are shown along with the effect of correcting for randomness in measurement. Note also, how the program effects change over the course of the program.

**Table 1:** Program Impact on School Attendance – Standardized Regression Coefficients of Degree of HK Program Participation on School Absences (n=256; middle, intermediate, and elementary school participants)

|  |  |  |
| --- | --- | --- |
| **Time Period** | **Uncorrected for Randomness in Measurement** | **Corrected for Randomness in Measurement** |
| End of program quarter1 | -.43 | -.56 |
| End of program quarter 2 | -.40 | -.53 |
| End of program quarter 3 | -.33 | -.44 |
| End of program quarter 4 | -.35 | -.46 |

In the two following tables, changes in response to the survey question, “I try to handle conflicts with others without hitting or pushing them,” are shown along with a the impact of correcting for unreliability.

*In the tables below “consistent” refers to a survey answer consistent with the Search Institute developmental asset of “peaceful conflict resolution” (number 36)*. *Not consistent, of course, refers to the opposite kind of response.* Finally, the table entries are the proportions of total cases.

Q6. I try to handle conflicts with others without hitting or pushing them. (Asset 36 Peaceful Conflict Resolution.)

**Table 2.** Responses to survey question at times 1 and 2 (proportions of total cases) (n=73; intermediate school students with three points of observation)

|  |  |  |  |
| --- | --- | --- | --- |
| **Time 1** | **Time 2** | **“True”** **Proportions** **(corrected for** **random** **responses)** | **Observed proportions** |
| Consistent | Consistent | .245 | .192 |
| Consistent | Not Consistent | .080 | .096 |
| Not Consistent | Consistent | .083 | .137 |
| Not Consistent | Not Consistent | .592 | .575 |

**Table 3.** Responses to survey question at time 2 and time 3 (proportions of total cases).

(n=73; intermediate school students with three points of observation)

|  |  |  |  |
| --- | --- | --- | --- |
| **Time 2** | **Time 3** | **“True”** **Proportions** **(corrected for** **random** **responses)** | **Observed proportions** |
| Consistent | Consistent | .232 | .233 |
| Consistent | Not Consistent | .112 | .096 |
| Not Consistent | Consistent | .194 | .192 |
| Not Consistent | Not Consistent | .462 | .479 |

Note that over the three time periods that about 28% (.083+.194) were “converted” from survey responses that were not consistent with the asset to responses that were consistent. On the other hand, about 19% of subjects were “backsliders,” moving from consistent to not consistent survey responses. Yet, overall there was quite a net improvement. Additionally, about 23% were “maintainers” – participants whose feelings about peaceful conflict resolution (q6) were in favor (consistent) throughout, apparently having had their feelings reinforced by the program.

**Digging Deeper (Slide 6) Point 3: The importance of identifying those participants not changed by a program.**

Among the participants, who was not “reached” by the Houston’s Kids Program?

In the table immediately below, the “resisters to change,” those throughout the time of the program who *never provided a response consistent with the Search Developmental Asset 36,* are shown. As will be seen, boys were more resistant to change than girls while there were no differences between participants in the fifth and sixth grade.

**Table 4:** Resisters to change-- baseline to end of program (n=73; intermediate school students with three points of observation)

|  |  |  |
| --- | --- | --- |
| **Grade** | **5th graders** | **6th graders** |
|  | 39% | 40% |
| **Gender** | **Girls** | **Boys** |
|  | 32% | 50% |

Notes: Table entries show the percent in each category of grade level and race that were resistant to change.

As is evident from the table above, boys were more *unlikely* than girls to move toward the Search Development Asset of peaceful conflict resolution. Half of all boys who remained with the program throughout the year were not changed in the direction of Search Institute 36.

In the table immediately below, the “*backsliders,” those who switched from responding in a manner consistent with the Search Institute Asset 36 to a “not consistent” response*, are shown.

**Table 5:** “Backsliders”—baseline to end of program (n=73; intermediate school students with three points of observation)

|  |  |  |
| --- | --- | --- |
| **Grade** | **5th graders** | **6th graders** |
|  | 12% | 13% |
| **Gender** | **Girls** | **Boys** |
|  | 17% | 6% |

As seen immediately above, girls were more likely to be “backsliders” than were boys over the course of the program while there were no differences by grade level.

**Program implications**. The challenge for the program is to find ways to motivate boys better to *adopt* peaceful conflict resolutions methods and to *reinforce* girls’ initial feelings better regarding peaceful conflict resolution.

**Helpful resources for dealing with randomness in measurement and over time alterations in program impacts --**

Steven Finkel, *Causal Analysis with Panel Data*. Thousand Oaks, CA: Sage, 1995.

Ross E. Traub, *Reliability for the Social Sciences.* Thousand Oaks, CA: Sage, 1994.

Lee M. Wiggins, *Panel Analysis: Latent Probability Models for Attitude and Behavior Processes.* San Francisco: Jossey-Bass, 1973.