

Expert Panel Review of the Family Policy Council Technical Paper 3

D. Longhi and L. Porter (2009) “Community networks—building community capacity, reducing rates of child and family problems: Trends among Washington State counties from 1998-2006”

Introduction

Susan Dreyfus, Secretary of the Department of Social and Health Services (DSHS), charged the Expert Panel to examine the conclusion validity of Technical Report 3 from the Family Policy Council (FPC). Richard Catalano, University of Washington School of Social Work (UW SSW), chaired the Panel and recruited experts in consultation with Jody Becker-Green, Senior Director of Planning, Performance and Accountability at DSHS. Panel members included Eric Brown, David Hawkins, Paula Nurius, and David Takeuchi (all from UW SSW); Paul Flashpohler; Miami University; Judy Hall, DSHS; Steve Aos, Washington State Institute for Public Policy; and Eric Bruns, UW Psychiatry and Behavioral Science. An organizing meeting was held on February 18th to discuss the approach to the review. The result of this discussion was to determine the process of the review and to expand the charge of the Panel to consider three questions:

1. What can be learned from the report and what value does it have?
2. To what degree can the reduced rates of child and family problems be attributed to the FPC-funded community networks?
3. How can FPC move forward to better answer question regarding impact of its community capacity building activities?

A second meeting was held on March 14th to reach consensus on the three questions. Due to scheduling conflicts Steve Aos and Eric Bruns were unable to participate. This report summarizes this discussion.

Question 1: What can be learned from the report and what value does it have?

The panel found that the report provided credible research, contributing to the three major findings on page 1 of the report. These findings are listed below with expert panel added modifiers in bold italics.

Among counties with state-funded Community Networks overall severity of problems, **as measured in this report**, decreased or remained stable while they worsened for those counties without state-funded Community Networks.

Among counties with state-funded Community Networks, the higher the average community capacity, **as measured in this report**, the larger the number of better-than-state trends in rates of locally prioritized child and family problems, like child abuse, youth substance abuse and dropping out of school.

Counties ***with state-funded Community Networks*** that achieved more improvements in community capacity, ***as measured in this report***, during this period achieved greater reductions in the overall severity of child/family problems, ***as measured in this report***, by the end of this period.

One of the major features of the Report is how it seriously considers the theory and impact of community capacity building. The past decade has been marked by a resurgence of interest in the influence of community on different social and health behaviors. For the most part, studies of the effects of communities or neighborhoods have been based on the aggregated characteristics of individuals as measured in censuses or other surveys. Typically, the proportion of variance in behaviors explained by these operationalizations of communities has been small, prompting some researchers to suggest that community effects have only a limited effect on individual behavior. Alternatively, other scholars suggest that weak effects are more likely due to inadequate conceptualization, operationalization, and measurement of community effects. This Report moves the study of communities further along by conceptualizing and measuring what communities do to promote social engagement or social estrangement, facilitate decision making, and enhancing leadership that eventually lead to well-being for individuals within the communities. FPC has engaged network members to consider solutions that move beyond changing individual behaviors to making larger social and system changes.

The Report includes some interesting and important findings about the association between community capacity and children and family problems. The findings appear to be consistent with underlying theorized mechanisms provided in the Report. Related findings from other reports provide conceptually convergent data (see Appendix). Despite the small sample of counties and the large geographic area covered by counties, the analyses show some statistically significant associations between community capacity and problems, controlling for some social and economic factors. As FPC refines its measures and designs, these results may provide directions for future research and program planning.

Question 2: To what degree can the reduced rates of child and family problems be attributed to the FPC-funded community networks?

The three major findings are appropriately framed on page 1 of the Technical report, describing trends of association. However, the immediate subsequent conclusion on page 1 that these data support interpretations of causal links between FPC-funded community networks and decreasing rates of child and family problems is not sufficiently established.

There are four major critiques of the conclusion validity that the FPC funded community networks were responsible for the reduced rates of child and family problems.

First, a non-equivalent comparison group quasi-experimental design is used to test whether the FPC funded community networks were the source of the change in child and family problems. This study compares FPC-continuously funded community

networks to those that were defunded in 2001. While these designs can protect against many threats to conclusion validity, selection bias is a critical threat that is not sufficiently controlled by this design. The Campbell Collaboration, a scientific group that conducts systematic reviews of intervention research to judge conclusion validity, states: In non-random assignment studies (NRAS) like the one used here, “use of group assignment mechanisms other than concealed randomization means that groups are unlikely to be comparable. These potential systematic differences between characteristics of participants in different intervention ‘groups’ are likely to be the issue of key concern in most NRAS, and we refer to this as selection bias. When selection bias produces imbalances in factors associated with the outcome of interest then ‘confounding’ is said to occur.”

The design used in this study compares 10 counties that had Community networks that were unfunded in 2001, due to non-performance in building a minimum level of community capacity by 2001, to 29 counties with continued network funding. The fact that the unfunded counties had FPC financial support withdrawn indicates that there are potentially meaningful unmeasured differences between the two groups that could explain the difference in performance. This makes the comparisons less than optimal. Potential selection bias exists since the communities were defunded for not performing, i.e., not meeting minimum administrative standards of having an operational network or not being in line with legislative intent to be family oriented, culturally relevant, locally planned and coordinated, and premised on outcome based, preventive services. This inability to meet these administrative standards may be related to the later intervention effect.

Examination of differences between groups included social, economic and demographic characteristics and a child and family severity index in 1998 and the changes in these variables between 1998 and 2006. While differences between the two groups of counties on severity index, food stamps, welfare grants, unemployment, population change, adult crime, race/ethnicity and divorce rate measured in 1998 were not significant, 1998 is not the point when the two groups of counties experienced the natural experiment, as this occurred when they were defunded in 2001. It may be that the initial 1998 year levels mask trends over the time between 1998-2001. The other way potential condition differences were examined was to control for the change in the demographic, social and economic characteristics of counties over 1998-2006. However, this change crosses the natural experiment point of 2001, and potentially equates changes at different points in the distribution. Community capacity at baseline was not examined as a control for potential county differences. This would be useful analysis to undertake to help address baseline differences as a potential confound to conclusion validity, and to assess this potential confound relative to other forces that the Report addressed.

Second, the theoretical model lacks specificity about what activities may actually reduce rates of child and family problems. While the model is helpful in highlighting key dimensions of community capacity building, it does not provide a discussion about the specific mechanisms that link community capacity building to reduction in problems. A challenge to establishing causality within the report concerns the absence of description and measurement of the activities of FPC. As the authors acknowledge, this study did

not describe the activities of capacity building, how these activities link to the indices of community capacity, and how the changes in community capacity are linked conceptually with reductions in outcomes. The authors suggest further qualitative and quantitative case studies be done to identify and study successful activities. Greater specificity is provided in subsequent reports (see Appendix); however, further specification will be needed as this research moves forward.

Third, the methods used to construct outcome measures, averaging across indicators and time periods, rounding of standard deviation units, are questionable. For the child and family problem measures, procedures scored the worst quartile. This method of scoring could mask positive changes over time in a county, and such a county could still be in the worst quartile. Using this scoring method and comparing counties to the state average may also mask positive changes at the county level. The technical paper does not discuss the benefits of the post hoc categorization (closing the gap with the state, doing better than the state, and improving--crossing over the state trend line); rather, are all grouped as positive changes and compared to the state average. Comparing county levels and trends over time is a clearer, more direct way of assessing the impacts of network activities over time. Finally, two 3-year averages are compared over time. While the authors suggest that this is done to even out fluctuations across years and to increase the sample sizes for measures of child and family problems, these averages may mask changes over time.

The community capacity building measure is based on independent raters' scoring of reports from each community network. Care is taken to explain in detail how various aspects of measurement were undertaken and the rationale, and illustrations were provided. Inter-rater reliability was good; however, the measure is still based on self-report, and it is possible that some networks get better at completing the report over time. Accordingly, change scores in community capacity building may reflect changes in report writing rather than actual changes in capacity. It would be helpful to have some alternative measures, for example, self-reports of community leaders and knowledgeable informants, and observations, to add validity to the community capacity measures.

Fourth, as noted in the report, county may not be the most appropriate unit of analysis. Some counties have multiple networks within a single county, while in other counties there were only single networks, but their intended impact areas are not known. Given this variability, it is challenging to ascertain or make specific recommendations regarding what the most appropriate unit of analysis may be for the FPC networks. Subsequent reports do help address this question (see Appendix), and additional efforts toward more specific definition of the unit of analysis is encouraged. Without a clear understanding of the impact area of the networks, it is difficult to know whether, or to what extent, FPC has had an impact on its target communities.

Question 3: How can FPC move forward to better answer question regarding impact of its community capacity building activities?

The multi-year efforts (cited as 16+ years in reports) of FPC in assessing and tracking community capacity and fostering the development of capacity relative to the rates of

major social problems such as domestic violence, infant mortality, child abuse, youth violence, school dropouts, teen pregnancy, youth suicide, youth substance abuse, and child out-of-home placement reduction is noteworthy. There are few states with this level of foundational data, provider networks, attention to formulating community capacity, and efforts to integrate community centered and research-to-practice models. Further work is necessary for more controlled tests that can address questions of causality.

Before a more comprehensive evaluation of the FPC networks can be conducted, it will be important to have a better description about what goes on in these networks. Studies documenting the characteristics of networks and their level of community capacity building should use both observational and interview methods. These studies should also identify the goals of each network. That is, what child and family problems and risk and protective factors are the networks aiming to influence, for what age groups and over what time period? Since a feature of the networks are for community members to make decisions about processes and outcome, it will be essential for future evaluations to consider these network goals as part of the impact assessment.

In addition to what the networks do, it is critical to define the target population for this activity in terms of developmental age and geographic area to be influenced. Further defining target population could help overcome the need to attribute the network activities to counties, and to define each network's developmental target population and target problem. By tying the objectives of each community network to circumscribed geographically based, developmentally focused, and specified target behaviors, and risk and protective factors, a sharper focus for evaluation may result. The Washington State Healthy Youth Survey results have begun to be used by the Family Policy Council and the networks. Because these results can be disaggregated to middle and high school catchment areas for most districts in the state, use of this survey to address problem changes could potentially provide better, more precise comparisons with potentially fewer selection bias problems. This survey data collected every two years from most middle and high schools in the state could provide better more precise comparisons with potentially less problems with selection bias. Subsequent reports have used these and other data (see Appendix), and further efforts in this direction are encouraged.

A final recommendation is that the Family Policy Council seek to establish a network of scientists experienced in conducting research on community capacity building, coalition formation and sustainability, evidence based program development, testing, dissemination, and community trials. The FPC has generated a theory, a measurement approach, and a set of accountabilities that are consistent with the limited research on community capacity building. We feel that the time may be ripe for extending voluntary research support to build on the base of research already conducted to examine the impact of community based initiatives to improve child and family outcomes.

Appendix A

The primary document for this evaluation is the Technical Report 3. Other FPC documents include:

- A) Effects of Higher Community Capacity Among Young Adults: Fewer Adverse Childhood Experiences (ACEs), Higher Social/Emotional Support and Better Health (November 3, 2010)
- B) Social-Normative Changes in Rural High Risk Counties with High Community Capacity that Accounted for Decreases in Youth Substance Use from 2000-2008 (December 2009)
- C) How do High Risk Counties Protect All Youth? (November 2009)
- D) Adverse Experiences and Academic, Social, & Health Impact (June 2010)
- E) Small Investments in Increasing Community Capacity Result in Large Public Cost Savings... (January 2011)

These reports are helpful in assessing complementary findings. In some cases this entails data from other sources (such as the state BRFSS; the WA Healthy Youth Survey). Some of the reports include attention to potential confounds that are relevant to the conclusions based on the correlations presented in Technical Report 3. Note, for example, technical notes provided in “C” (How do High Risk Counties Protect All Youth?) that address questions related to bias as well as other possible explanations for observed results. This report and that of above noted “D” (Adverse Experiences and Academic, Social, & Health Impact) link community capacity data with findings from the WA State Healthy Youth Surveys. Report “D” extends previous research report questions regarding whether higher community capacity is associated with lower rates of behavioral and physical problems among youth with adverse experiences. This and other reports reflect an effort to better “map” patterns of adverse youth exposures in Washington state, particularly those youth with greater and more severe exposures. This kind of data mapping provides a potentially rich foundation for overlaying other geographically relevant data to more fully address questions of community features and their implications for preventing or curbing the effects of child and family problems.

Report “A” (Effects of Higher Community Capacity) links community capacity data with BRFSS data regarding Adverse Childhood Experiences, distinguishing correlations by age groups. Findings are consistent with theorized expectations, providing a kind of confirmatory triangulation across multiple data sources. Similarly, report “B” undertakes a risk and protective factor analysis of changes in child and family problems, aiming to test conceptualized linkages to components of community capacity.

Report “E” (Small Investments....) further extends a kind of logic model of interim factors theorized between the FPC structure and support and observed outcomes (child and family). This includes recognition of multi-level theorizing (eg, public policy to individual functioning), with efforts to illustrate risk and protective factor across multiple levels (eg, community, school, peer, individual). The technical appendix addresses limitations related to proof of causal relationships. This section includes an overview of quantitative and qualitative studies from which data have been drawn in the larger effort to assess the value and linkage of community capacity building to positive outcomes.

This includes an inventory of types of community network activities and how these are associated with community capacity characterization organized by quartiles. This is not intended as a deeply theorized conceptual model, but does reflect some of FPC's ongoing thinking and efforts beyond the original technical report of 2009.

None of these reports or studies is without deficiencies. Although all have limitations, the body of findings does provide convergence, reflects innovative and reasonably conceptualized theoretical bases for purported linkages, and provides an initial basis for more nuanced and, ideally, fuller-scale research that could address some of the more important gaps or limitations.