Research-Practice Partnerships for Implementation of Evidence-Based Practices in Child Welfare and Child Mental Health

A White Paper

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INTRODUCTION

Although they usually play different roles in the process, researchers, practitioners and policymakers of child welfare and child mental health are united in their efforts to meet the needs of the most vulnerable segments of our population, children who are victims of abuse and neglect and/or experience mental and behavioral health problems. These efforts include needs assessment and services development, evaluation, implementation and sustainment. Often, these efforts are conducted independent of one another such that researchers assume responsibility for generating the knowledge necessary to identify youth in need of services and the most appropriate services to address these needs, while practitioners and policymakers assume responsibility for delivering these services. However, the responsibilities themselves are not independent but rather are fundamentally linked to one another. This linkage is embodied in the processes of translational research and the translation of research into practice.[1]

Several studies have pointed to a large gap between the development of services shown to be effective in the prevention and treatment of child and adolescent mental health and behavioral problems and the routine use of these services.[2-4] For example, the beneficial effects of many psychotherapeutic and pharmacologic interventions for children and adolescents have been repeatedly demonstrated through clinical trials of treatment efficacy.[5] In contrast, the benefits of mental health services that have not been supported by empirical evidence have generally been weak at best[2, 6, 7] and some intervention may actually cause harm.[8] The majority of youth in need obtain services lacking evidence to support their effectiveness, and lack access to services supported by such evidence.[7, 9, 10]

With respect to child welfare, numerous forms of evidence-based practice (EBP) exist to support the delivery of many direct services. These include screening and assessment tools such as the Child Abuse Potential Inventory[11] and Child Behavior Checklist;[12] parent-mediated approaches for externalizing problems,[13-16] and abuse prevention interventions like Project SafeCare.[17] These practices have been demonstrated to improve access to needed mental health services and reduce rates of child problem behaviors and out of home placements. Nevertheless, although recent estimates suggest that about 60% of youth in child welfare systems receive evidence based programs,[10] there is little evidence that such programs are implemented effectively.[4, 18,]

The gap between research and practice has been attributed to a number of factors, including limited time and resources of practitioners, insufficient training, lack of access to peer-reviewed research journals, lack of feedback and incentives for use of EBPs, the logic and assumptions behind the design of efficacy and effectiveness research trials, and inadequate infrastructure and systems organization to support translation.[6, 19] More research is needed to identify how to overcome individual, organizational, and systemic factors that facilitate or impede implementation of evidence-based or evidence-informed treatments, practices, and interventions (hereafter referred to as EBPs) in service sectors that cater to children and adolescents, including specialty mental health and child welfare.[20-22]

Research-practice partnerships represent an important strategy for reducing this gap. Such partnerships conduct research that is not only valid and reliable, but also relevant to the needs of policymakers and practitioners. As such, they are critical to effectively translating research into

practice. Such translation is rarely a linear process and often assumes a cyclical character;[23] consequently it "relies on close communication and partnerships between researchers and community-based social service agencies and professionals" (p. 102).[24] Unfortunately, one of the barriers to the implementation of EBPs is the "poor links between those who carry out research and those who provide services" (p. 143).[25] Partnerships between these two groups of stakeholders are difficult to maintain because of differences in the organizational cultures of researchers, practitioners and policymakers; a lack of trust and long-term commitment to the partnership, a lack of clearly defined roles; insufficient and unequal distribution of resources; and inadequate exercise of scientific rigor.[1]

The aim of this white paper is to describe the structure and operation of research-practice-policy partnerships for child welfare and child mental health with a particular focus on disseminating and implementing EBPs, identify the core elements of successful partnerships, and offer some advice on how to develop and maintain such partnerships and use them to maximum effect. To do so, we begin with an overview of the general principles of research-practice partnerships, present three different models of effective partnerships in child welfare and child mental health, illustrate these models through case studies, and extract key elements of successful partnerships from these case studies. It is intended for researchers, practitioners, and policymakers alike who are need of advice on how to develop, utilize and sustain such partnerships.

WHAT IS A RESEARCH-PRACTICE PARTNERSHIP?

The principles of Community-Based Participatory Research (CBPR)[26] or Community-Partnered Participatory Research (CPPR)[27] offer a useful lens for considering the essential elements of successful research-practice partnerships in child welfare and child mental health. CBPR/CPPR approaches differ from other forms of community-based research, much of which either "targets" a community or is conducted within a community with minimal involvement of community members other than serving as research "subjects".[28] It is distinguished from other forms of community-based research by its emphasis on developing and managing relationships between university-based researchers and community collaborators, and by its focus on achieving social change through community empowerment.

Israel and colleagues[29] identified four fundamental assumptions that govern the conduct of CBPR: 1) genuine partnerships require a willingness of all stakeholders to learn from one another; 2) in addition to conducting research, there must be commitment to training community members in research; 3) the knowledge and other products gained from research activities should benefit all partners; and 4) a long-term commitment is required of researchers to the community and the community to the goal of improving the health and well-being of its members. Minkler and Wallerstein[26] further provide criteria for determining the success of the projects undertaken by such partnerships. First, the project should have clear goals that are jointly defined, based on community needs and an agreed upon "common good". Second, collaborators are adequately prepared to work with one another. For instance, researchers should be familiar with the principles and practice of CBPR and be willing and able to utilize community expertise. Third, all partners are engaged in all levels of activity from planning to execution to dissemination of results. Fourth, the approach reflects the culture of the community, is innovative and original, and emphasizes sustainability. Fifth, the project results in outcomes judged as positive by all

partners, including the development of a long-term partnership between researchers and the community. Sixth, the results of the collaborative efforts are widely reviewed and disseminated through publications, reports and presentations at both academic and community forums. Finally, the project includes ongoing reflective evaluation, including an evaluation of the project and the partnership as well as an assessment by both researchers and communities of a continued willingness to work with one another.

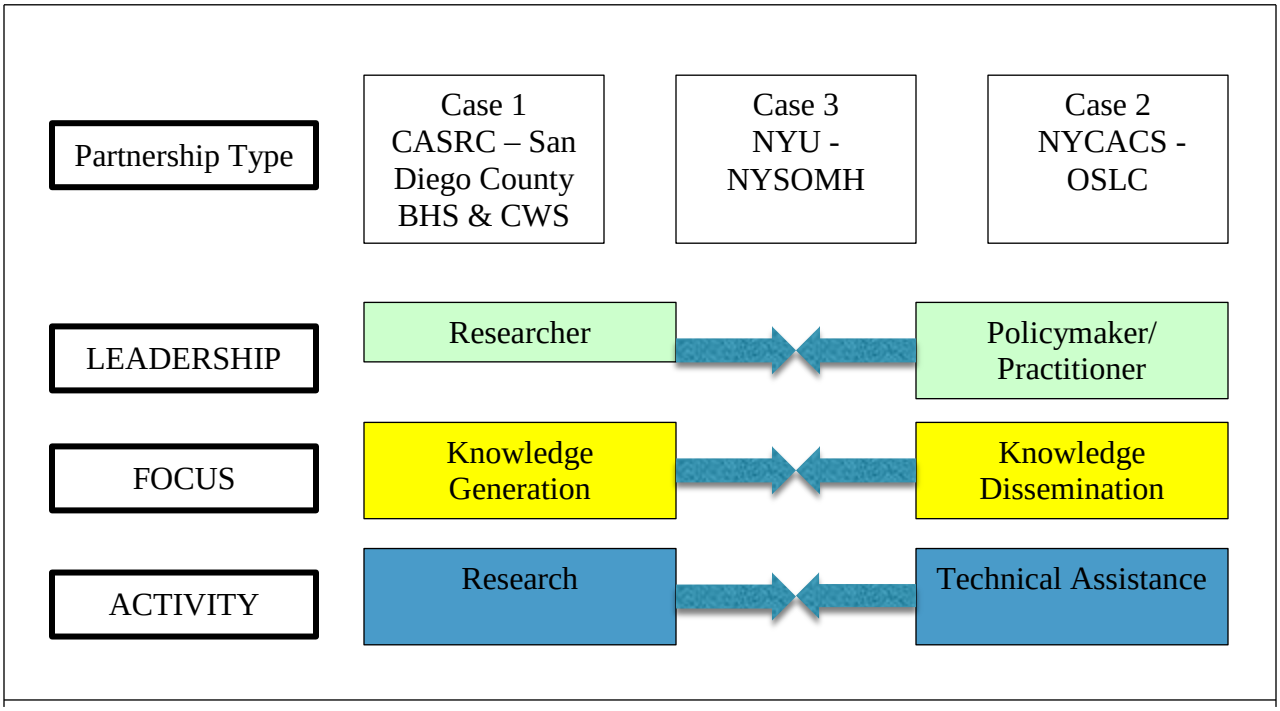
When compared to traditional forms of translational research, CBPR may represent additional demands on researchers, including having to share power over the direction of the project and the allocation of resources and spending a considerable amount of time building trust in the community. However, CBPR also offers certain benefits when compared to traditional translational research. For researchers, it helps to improve the validity and reliability of the research conducted and helps to bridge gaps in understanding, trust, and knowledge between academic institutions and the community. For the community, it helped to get its needs met through research that is relevant and empowers people who historically have had little say in the research performed upon them or about them.[30]

MODELS OF SUCCESSFUL RESEARCH-PRACTICE PARTNERSHIPS IN CHILD WELFARE AND CHILD MENTAL HEALTH

Research–practice partnerships come in many different forms, ranging from investigator-initiated research and minimal community input to joint decision-making on all aspects of research with active community direction and interpretation of the results.[31, 32] In these models, the researcher assumes a primary or co-leadership role. Although the CBPR movement has sought to place greater emphasis on the role of the community partner, it continues to give primary emphasis to research as the *raison d' etre* for the partnership, and hence the importance of the researcher role.

In this section, we introduce three different models for successful research-practice partnerships representing a continuum of approaches to the generation and dissemination of knowledge with policy and practice relevance. All three models involve some degree of research and some degree of technical assistance, some degree of knowledge generation and knowledge dissemination. Where they differ is in regards to the amount of attention given to either research or technical assistance, to either knowledge generation or dissemination. They also differ with respect to the research or policy/practice background of the partnership's leadership. Model 1 represents a long-term partnership between researchers affiliated with a nationally recognized research center and practitioners and policymakers affiliated with local youth-serving public service systems. Led by a prominent researcher, the primary function of this partnership is to conduct research and generate knowledge. Model 2 represents a short-term partnership between researchers with practice experience and policymakers and practitioners affiliated with one of the largest child welfare systems in the United States. Led by the service system leaders, the primary function of this partnership is to provide technical assistance and disseminate knowledge related to evidence-based interventions. Model 3 represents a combination of the first two models such that both research and technical assistance, knowledge generation and dissemination are undertaken in equal measure under the leadership of an individual with research, policy and practice experience who acts as a "culture broker". This continuum of models based on the domains of activity, focus and leadership is illustrated in Figure 1 below.

Figure 1. Successful Research-Practice Partnerships in Child Welfare and Child Mental Health



The three models adhere to many, but not all, of the principles of CBPR or CPPR. For instance, several researchers have argued that an essential requirement of research-practice partnerships is that they are co-led by the research and the community partners.[26-30] In contrast, as illustrated in the case studies below, leadership of successful research-practice partnerships in child welfare and child mental health is not always equally shared between researcher and practitioners/ policymaker. Rather, for a partnership to be successful, all partners must be willing to choose the role they play and all partners must agree to that choice. Furthermore, the case studies also demonstrate that research-practice partnership is successful if it meets the specific aims of the researchers, practitioners and the policymakers engaged in the partnership. Some aims are shared among all partners (e.g., improved outcomes in youth served by partners), while other aims are specific to each partner (e.g., more publications for the researcher, reduced costs for policymaker, more satisfied clients for practitioner).

Second, successful partnerships in child welfare and child mental health do not always necessarily involve training of community partners in collecting and analyzing data, but they do involve some form of mutual dependence among the partners. Typically, researchers collect and analyze the data while community partners provide access to participants, review study protocols, and disseminate study findings. In implementation research, community partners play an important role in using EBPs that are being implemented. Researchers cannot achieve their aims without the engagement and assistance of practitioners and policymakers and vice versa. Each partner is considered to be essential to achieving the aims of all. Chamberlain and colleagues[33] described three specific models employed in the implementation of two EBPs that focus on improving outcomes for children and their families in the juvenile justice, child welfare and mental health systems: the Rolling Cohort Model used in England, the Cascading Dissemination model used in San Diego County, and the Community Development Team model

used in California. All three models involved "partnerships between researchers who developed the interventions and community systems and policy leaders who ultimately engineered the implementation of the interventions in their communities. In all cases, the partnership was borne out of a community policy priority or gap in existing services that provided the backdrop for the opportunity to introduce the evidence-based interventions. Community stakeholders and researchers either co-designed or were highly involved in the initial planning process for the projects" (p. 288).

Third, successful partnerships in child welfare and child mental health do not always achieve a balance between knowledge generation and dissemination.[26] However, they do yield improved outcomes, improved quality of services delivered, more cost-effective care, and innovative approaches to services delivery. For instance, a study by Brookman-Frazee and colleagues[34] of Research Community Partnerships (RCPs) illustrated the iterative and dynamic process of RCP development when tailoring evidence-based intervention, training and implementation models for delivery across different childhood problems and service contexts. Interpersonal and operational processes were linked to proximal outcomes of synergy, collaborative relationships and knowledge exchange, as well as to distal outcomes of enhanced capacity through EBP implementation and sustainable infrastructure for collaboration.

Fourth, sustainability is not always the goal of the partnership or an indicator of a successful partnership. Some partnerships have very narrow, short-term objectives while others seek to build long-term relationships. Partnerships may be viewed as successful if there is sustainability of the products of the partnership (i.e., an implemented evidence-based treatment).

Finally, successful partnerships in child welfare and child mental health involve some form of cultural exchange between partners. Cultural exchange is a transaction of knowledge, attitudes and practices that occurs when two individuals or groups of individuals representing diverse cultural systems (ethnic, professional, organizational, national) interact and engage in a process of debate and compromise.[1, 35] It is a bidirectional process in which two or more participants (stakeholders) derive something from and are changed as a result of the transaction. Such an exchange requires an ability to communicate and compromise as much as it requires a willingness to collaborate. Collaborators communicate with one another for the purpose of generating and sharing knowledge to improve the functioning of community organizations and the health and well-being of community members.[36] Collaborators also must "negotiate a balance between developing valid generalizable knowledge and benefiting the community that is being researched" (p. 774).[37] This negotiation is often facilitated by a culture broker, an individual possess an understanding of the cultural systems of research, practice and/or policy, especially where they diverge and where they intersect.[38]

Each model is illustrated by a case study of a particular partnership dedicated to child welfare and child mental health. Information used to develop these case studies was based on individual semi-structured interviews with 12 "key informants" who assumed the role of researcher, practitioner, or policymaker in these partnerships. Interviews were recorded and transcribed for analysis. A "template approach"[39] was used to identify "common elements" of successful partnerships.

Case Study 1: Child and Adolescent Services Research Center and San Diego County Behavioral Health Services and Child Welfare Services

Introduction

The first case study involving an established research center and county-level child welfare and child mental health service systems illustrates the structure and operation of a research-dominant partnership. Although the partners view themselves and one another as co-equals, the researcher serves as the principal leader of this partnership. The primary function of this long-term partnership has been to generate knowledge relevant to the development and implementation of evidence-based practices that is generalizable to the larger population of children and adolescents in need of services. The research agenda is driven primarily by extramural (predominately National Institutes of Health) funding opportunities as well as the access to study participants afforded by the community partners. However, the partnership has also served an important if secondary function of providing technical assistance to community-based child serving systems for the purpose of improving service quality and outcomes. The following case study also illustrates the characteristics of a long-term relationship among partners.

Background

The Child and Adolescent Services Research Center (CASRC) at Rady Children's Hospital-San Diego is a consortium of over 100 investigators and staff from multiple research organizations in Southern California. CASRC has a strategic focus on improvement of public pediatric mental health care through a program of mental health services research that spans clinical epidemiology studies linked to evidence-based practice, effectiveness and quality of care studies, and implementation studies that include organizational, financing, and policy issues. Under the leadership of Director John Landsverk, the growth of the CASRC research agenda occurred in three phases.[40] Early work conducted under the rubric of the Child and Family Research Group (1989-1994) focused primarily on the mental health needs of children in child welfare and examined child, family and system factors affecting access to and use of mental health care provided primarily by the public child mental health system. From 1994 to 2005, CASRC grew to be a nationally recognized center on pediatric mental health services, expanding the portfolio of studies to include children cared for across multiple public sector service systems. The third phase saw the development of a robust program of research on the dissemination and implementation (D&I) of evidence-based interventions "with a targeted focus on developing innovative design and measurement strategies and technology to address the formidable challenges of the emerging science of D&I" (p. 84).[40] In all three phases, CASRC has worked collaboratively with community service systems at the local, state and national level. "Locally, CASRC has a 22 year history of partnering with administrators and providers from multiple public agencies (e.g., child welfare, mental health, Medicaid physical health, drug and alcohol education) and with community organizations (for example, the Foster Parent Association, Exceptional Family Resource Centers, Learning Disabilities Association, and local mental health advocacy groups" (p. 84).[40]

Benefits to Research: Knowledge Generation

One of the earliest studies resulting from these partnerships examined client crossover from the social services (DSS) to the mental health (SDMHS) system in San Diego County.[41] Public mental health service use was examined in 1,352 clients participating in a longitudinal study of children in foster care. Overall, 17.4% of the children in DSS were also served in SDMHS. In another study,[42] administrative data from five different service systems in San Diego County were used to examine racial/ethnic differences in caregiver report of psychotropic medication use for a random stratified sample of 1,342 children who were served during the second half of fiscal year 1996–97. Caregivers of African-American and Latino children were less likely to report past-year use compared to white children; caregivers of Latino children and "others" were less likely to report lifetime use. A more recent study conducted in a partnership with San Diego County Child Welfare Services (CWS)[43] examined the impact of a foster parent training and support intervention (KEEP) on placement changes to determine whether the intervention mitigates placement disruption risks associated with children's placement histories in an ethnically diverse sample of 700 families with children between ages 5 and 12 years. Families were randomly assigned to the intervention or control condition. The number of prior placements was predictive of negative exits from current foster placements. The intervention increased chances of a positive exit (e.g., parent/child reunification) and mitigated the risk-enhancing effect of a history of multiple placements.

In all three of these studies, community partners provided access to the data, participated in data collection, and reviewed study findings. Agency staff received training in data collection by CASRC investigators. According to a CASRC investigator, agencies provided limited input as to what should be studied and how; rather, their primary function in these partnerships was to provide access to study participants. In the third study, child welfare case managers and foster parents received training in the intervention and used it with a cohort of families meeting study inclusion criteria.

Benefits to Community: Systems Improvement

These partnerships were not entirely about conducting research or generating knowledge that could be generalized to all service systems. The San Diego County System of Care Evaluation (SOCE) was developed through the System of Care Council with direct advisory support from the Super Outcomes Committee and collaborative partners. In 2004, a series of community stakeholder meetings were held to obtain input and feedback on the development of an evaluation system for San Diego County's Children, Youth and Families Behavioral Health Services (BHS). Stakeholders were involved from the beginning of the development process: clinicians, administrators, policy makers and families/consumers. SOCE measures were chosen because of their assessment of System of Care goals as defined by the County and the availability of information to be analyzed at multiple levels: the client level, the program level and the system level. The specific objectives of the System of Care Evaluation were to: 1) Assure accountability for the delivery of results to our consumers; 2) Build and sustain the momentum of SOC accomplishments; and 3) Effectively and efficiently move decision-making to action and results. CASRC investigators provided technical assistance in data collection and analysis under a contract to BHS that was managed by Assistant Deputy Director Henry Tarke. This arrangement was seen to be more program evaluation than research per se, but in return for

an evaluation of systems outcomes, CASRC investigators were granted access to county level services data for research purposes.

CASRC investigators routinely met with staff from the two service systems to review research findings and discuss possible issues for research. In meetings with BHS, they would review results of CASRC studies as well as CASRC-produced Systems of Care reports to identify needs for additional information, such as patterns of drug and alcohol abuse in the county. In meetings with CWS, CASRC researchers would share findings with agency leadership and program managers.

As an illustration of the benefits of the partnership to the community partners, one of the earliest findings resulting from their partnered research was that two thirds of the youth in child welfare met screening criteria for developmental disabilities. Out of that finding came a long-term project that continues to focus on universal screening for developmental problems in youth served by CWS and a much stronger relationship between the developmental services offered at Rady Children's Hospital and the San Diego County child welfare system. In another instance, the results of a study conducted by CASRC investigators[44] were disseminated by BHS to all county-funded therapists in the hope that it might improve delivery of services at the individual level. It was also used by CASRC investigators to advocate for changes in services delivery and the use of more evidence-based practices at the systems level. In both instances, the research findings were used to improve quality of services. The research conducted by CASRC and other investigators documenting the limited effectiveness of wraparound services was also used to support BHS's decision to reduce delivery of such services. The Systems of Care reports was used by the County to justify continued funding for services when findings pointed to successful outcomes, and for expansion of services when findings pointed to weaknesses or deficits in current service delivery. These reports were also used to respond to critics who argued that the County was not adequately responding to youth behavioral health needs in San Diego.

The Present: Adjusting Partners, Enduring Cultures

John Landsverk retired as Center Director in 2014, and hospital management decided to transfer responsibility for most of CASRC's research activities to the University of California, San Diego. Nevertheless, CASRC investigators continue to prepare systemwide annual reports for BHS and collaborate with BHS and CWS staff in conducting services research.

Case Study 2: New York City Administration for Children's Services and Oregon Social Learning Center

Introduction

The following case study illustrates a model of a practice-dominant partnership in which the relationship between researchers, practitioners and policymakers is driven by a policy decision to improve quality of care delivered by using practices with demonstrable outcomes with the researcher assuming responsibility for dissemination. In this model, the policymaker serves as the principal leader of the partnership. Also in contrast to Model 1, the primary function of the

partnership is to disseminate knowledge and provide technical assistance related to service delivery; however, this dissemination both requires and provides an opportunity to conduct research on EBP implementation and sustainment. In this instance, the research agenda is informed by the community partner's need to deliver high quality services to its clients. In contrast to the previous case study, the following case study also illustrates the characteristics of a successful, short-term relationship among partners.

Background

In 2012, under the leadership of Commissioner Ronald Richter, the Administration for Children's Services (ACS) in New York City made a decision to use evidence-based interventions to strengthen parenting for foster, biological, and adoptive parents involved in the child welfare system. In changing the role of case managers to support parents of children in foster care, ACS hoped to decrease placement disruptions, decrease the population in foster care, decrease recidivism, and increase permanency by 20 percent. The plan was to train over 300 case managers serving over 2,000 children and families in a number of parent-focused evidence-based interventions. The implementation of evidence-based practices was a "top-down" decision based on prior experience with such practices as part of a larger Juvenile Justice Initiative.

To carry out this plan, ACS contacted Patricia Chamberlain, Senior Scientist at the Oregon Social Learning Center in Eugene, Oregon. A researcher with practice experience, Chamberlain had developed evidence-based parent training interventions, including Multidimensional Treatment Foster Care (MTFC)[13] and Keeping Foster and Kin Parents Trained and Supported (KEEP).[43] Although the agency had not previously worked with Chamberlain, she had implemented a number of MTFC programs in New York City and had familiarity with some of the agencies participating in the project. According to Deputy Commissioner Leslie Abbey,

> "Patti entered pretty quickly. We were under time constraints because there were only a few years left in Bloomberg administration. We had to figure out ways to make this happen quickly. We talked to a bunch of different people but quickly went straight to Patti… I knew from my previous involvement with the Juvenile Justice Initiative that if you were going to develop an evidence-based model for foster care, the only person to talk to was Patti. The only model that was evidence-based was hers."

ACS leadership asked Chamberlain if KEEP would be an appropriate intervention with their service population; they also solicited her advice on choice of an appropriate training program for biological parents. These conversations led to the selection of KEEP, Parenting Through Change (PTC), and Youth Development Skills Coaching (a subcomponent of MTFC). In addition, ACS specified that they wished their case managers to be trained in Family Finding (the Kevin Campbell Model) in conjunction with Hillside Family Services. ACS also wanted staff trained in Enhanced Permanency Training and how to interact with the legal system.

Known as Child Success New York City (CSNYC), the project was planned so that it would be implemented in stages. The first stage would be a proof of concept and involve a cohort of five agencies selected by ACS, using data on length of stay, size, and rates of adoption. Subsequent

stages involved training additional cohorts until every case manager within ACS agencies was trained.

Chamberlain negotiated directly with ACS to provide training and supervision in PTC and KEEP and overall project management. In turn, ACS negotiated directly with the five agencies to secure their participation. Chamberlain was responsible for training caseworkers and supervisors to fidelity in the five interventions, creating a cadre of trainers from case planners who had reached fidelity, and providing data each month to ACS and the independent project evaluator on attendance, engagement, child behavior problems, visitation observations, saturation, and participation in consultation. Chamberlain sent these reports to the agencies five days before sending them to ACS so they could make corrections if necessary. She also participated in twice monthly phone calls with executive directors of the five agencies and ACS.

Benefits to Community; Research-Informed Training and Technical Assistance

Implementation of CSNYS was but one component of an overall effort by the senior leadership of ACS to implement evidence-based interventions. According Deputy Commissioner Abbey, prior to Richter's appointment as Commissioner,

> "there had not been the commitment from leadership to move it out of a relatively small role into full-scale operations. And when Ron Richter came back as Commissioner, he was the one who developed JJI (Juvenile Justice Initiative). The goal was to bring evidence-based models and promising models into every aspect of ACS, including congregate care, preventive, and even more with juvenile justice because we oversaw detention facilities. And so CSNYC was just one component of all the evidence-based work that we were doing."

Another benefit of the partnership for ACS was that they were relieved of the responsibility for managing different interventions and working with different treatment developers. As explained by Deputy Commissioner Abbey, Chamberlain

> "…brought in the PTC people because she felt it was a nice fit with KEEP. I kind of knew about KEEP and felt that that is probably where we wanted to start. It seemed like the right level of intervention. It had a nice structure to it, but it wasn't like overwhelming and it had already been tested. And then she brought in the PTC people. And what was really nice for us is that she really managed the relationship with them because they were like less flexible. But she worked with us and them."

The partnership also resulted in certain benefits to the five community agencies being trained in the interventions. According to a deputy commissioner, all five agencies acknowledged the need for a program like CSNYC and admitted to certain benefits, especially with respect to the training of birth parents and foster parents. Training of staff and a reduction in caseloads were also perceived as benefits resulting from the program. The program also resulted in closer collaborations between parents and case managers. Echoing the view of ACS leadership,

agencies saw the need for standardizing services delivered to clients due to the wide variation in outcomes based on agency assignment.

Benefits to Research: Evaluation and Knowledge Generation

ACS made it clear that the only research they were interested in was an evaluation of whether the project achieved benchmarks in placement stability, permanency, recidivism and census, and contracted with the Chapin Hall Center at the University of Chicago for this purpose. For her part, Chamberlain viewed the project as a research opportunity "to put the programs to the test in a big way where we can have a public health impact." Her primary interest was in learning whether "you make a difference at the population level." As part of that interest, she also wanted to know what was required to successfully implement these interventions. "We felt that given our history with implementation research, we would try to find a way to map implementation research onto the primary agenda, which was obviously New York ACS's agenda." Chamberlain proposed training supervisors to integrate these interventions into the daily practice culture using an intervention known as R3 (which stands for reinforcing effort, relationships, and small steps), and then evaluating the effectiveness of that intervention. Chamberlain also proposed to implement a fidelity monitoring data system known as Computer Assisted Fidelity Environment (CAFE), originally developed to monitor implementation and fidelity of KEEP. In this project, CAFE grew to have many more functions as ACS found it to be appealing but wanted additional data collected.

The Present

In 2014, ACS underwent a change in leadership and the aims of CSNYC were substantially curtailed out of concerns over whether there was the due diligence necessary in the selection process for the interventions. Consequently, the project never advanced to scaling up the training to all ACS contracted agencies. Nevertheless, the evaluation of the program up to that point indicated that project goals were attained. Furthermore, the five agencies that participated in the project continue to use the EBPs. For Richter and Abbey, the partnership advanced the agenda of providing quality services to the youth of New York City through the use of evidence-based and promising interventions. For Chamberlain, the experience provided an opportunity to evaluate the R3 model, but also highlighted the importance of the external setting in determining the success or failure of implementation efforts. This setting included the leadership and political support necessary for implementation.

Case Study 3. New York University and New York State Office of Mental Health

Introduction

The following case study illustrates a type of a partnership in which research and technical assistance are given roughly equal weight, as its primary function is to both generate and disseminate knowledge related to implementation of evidence-based practices. In this model, policymakers and researchers share relatively equal responsibility for leadership of the partnership. However, what is especially distinctive about the research leaders is their experience as practitioner and policymaker as well as researcher. In this instance, the research agenda is

informed by the community partner's (a state agency) need to deliver high quality services to its clients and by the researchers' desire to use the community as a "natural laboratory" for developing, testing, and implementing evidence-based practices in child mental health settings. In contrast to the previous case study, the following case study also illustrates the characteristics of an ongoing relationship among partners.

Background

The Center for Implementation-Dissemination of Evidence-Based Practices among States, known as the IDEAS Center, is an Advanced Center funded by the National Institute of Mental Health. Located at the New York University (NYU) Department of Child and Adolescent Psychiatry, IDEAS is dedicated to advancing implementation science in health and mental health systems serving children, adolescents, and their families. Its mission is to improve the effectiveness and efficiency of state roll-outs of evidence-based practices (EBPs) and quality improvement initiatives (QI). The Center's research activities are framed around three identified implementation challenges: 1) engagement in EBP initiatives (at agency, provider and consumer levels); 2) integration of data decision support systems for monitoring service delivery and outcomes; and 3) pragmatic mixed methods and measures to support efficient implementation in the dynamic policy environments of States. It does so in a partnership with the New York State Office of Mental Health Division of Integrated Community Services for Children and Family. The Office of Mental Health (OMH) operates psychiatric centers across the State, and also regulates, certifies and oversees more than 4,500 programs, which are operated by local governments and nonprofit agencies. These programs include various inpatient and outpatient programs, emergency, community support, residential and family care programs

The Director of the IDEAS Center is Kimberly Hoagwood, Vice Chair for Research in the Department of Child and Adolescent Psychiatry at the New York University School of Medicine. She also works with the Division of Child, Adolescent and Family Services at the New York State Office of Mental Health (OMH). Along with colleague Mary McKay, the McSilver Professor of Poverty Studies and Director of the McSilver Institute for Poverty Policy and Research in the School of Social Work at NYU, Hoagwood also directs the Clinic Technical Assistance Center (CTAC), funded by OMH, which provides technical assistance on how to improve the quality of children's care to the over 340 clinics operating throughout the state. "The contract is for service provision, but because we have the support from NIH through our Advanced Center (IDEAS), we can use it as a laboratory to do the research that is important to the state in improving the quality of their services." Their multiple roles and experience enables Drs. Hoagwood and McKay to serve as culture brokers, bringing together researchers, practitioners and policymakers to address child mental issues of common interest. They are also able to incorporate both research and practice/policymaking perspectives when engaged in conducting research on child mental issues or translating the results of that research into policy or practice.

Researchers meet with OMH administrators at least on a quarterly basis. During these interactions, researchers "don't wait to present them with results before all of the data are collected and analyzed and verified," according to Hoagwood. "This is a difference with typical academic researchers. We're not going to wait until everything is spit-polished, you know, ready

to go and out the door in press. You can't do that in this kind of policy environment." The foundation for this partnership is an iterative process that is not typical of academic research.

Benefits to Community: Technical Assistance and Systems Improvement

The Center has provided numerous benefits to the Office of Mental Health through its technical assistance as well as its research efforts. The Community Technical Assistance Center is designed to help New York State clinics address the challenges associated with the recent changes in clinic regulations, financing, and overall healthcare reforms. CTAC's goal is to provide clinics with a set of technical assistance and training activities and tools that promote effective care through efficient practices. CTAC provides training on specific clinical skills and evidence-based practices**,** and importantly training to help clinics develop strong business and financial models to ensure sustainability. As part of these efforts, Center researchers developed and implemented five system strategies driven by empirically based practices: (a) business practices, (b) use of health information technologies in quality improvement, (c) specific clinical interventions targeted at common childhood disorders, (d) parent activation, and (e) quality indicator development. This effort has been ongoing since 2002 in a partnership involving researchers, policymakers, providers, and family support specialists. Research partners also makes themselves available to respond to specific requests from OMH staff. As explained by researcher McKay:

> "We have access to information and I think that is an incredible important resource to them. They don't have time to look up best practices. If they find an option, they generally go with one option. We can generate a range of options. We can tell them the pros and cons. Our analytic skills, I think are pretty advanced. Our conceptual skills are pretty advanced. And I think that the kind of skills that we bring, they don't necessarily have."

McKay further distinguishes the difference between the kind of OMH-funded research conducted when providing technical assistance and the kind of NIH-funded research conducted when engaged in addressing broader issues of implementation and services delivery.

> "I think that sometimes the headaches of systems and policymakers need more rapid response than "Can you do a study". They use our findings a lot, but I think the things that they most care about they have to be identified and solved more quickly. And so I think our job as researchers is to rapidly translate what is known about the headaches they have. They can't wait five years for us to figure it out. And so I think that pacing is different. And so if you are going to a research partner like Kimberly and I, you have to be willing to do a whole range of things in that scientific capacity to be really helpful to them."

In some instances, such technical assistance from researchers has led to the elimination of existing programs. OMH Deputy Commissioner Donna Bradbury cited as an example an initiative known as Child and Family Clinic Plus. "It was a multi million-dollar investment. It was a big deal. It was statewide; it was highly publicized. And time was going by and we were hitting very specific barriers and not at all seeing the growth in the outcomes that we were

hoping to see." OMH requested one of their research partners perform an evaluation of the program. Although the findings "didn't show us anything that we didn't already know, it was kind of confirming… It just validated our own gut instincts that we've just got to stop this before it gets worse."

However, the benefits of the research conducted by the research partners extend beyond program evaluations and technical assistances. The policymakers also note the benefits that have been gained from NIH funded research as well, pointing especially to the family engagement interventions. NIH funded research is not viewed as an alternative to technical assistance, but as fundamentally linked, as Bradbury observed:

> "It is like the chicken and the egg, which came first, right? What pops into my head right now is the work that [the researchers] are doing with family support connected to waiver and the organizational stuff around the family support providers. That sort of stuff if really unbelievable useful to us because we are in this critical phase in New York State where we are changing everything. We are designing this proposed Medicaid/Medicare package and family support plays prominently in that. And the useful information that [the research partners] are doing will feed into that and help us implement that in a way that makes sense."

Division Deputy Director Meredith Ray-LaBatt referred to the research partners as "visionaries" who "get the direction the way the system needs to go. So in that respect, I think when we talk about things that we want to learn, it is also to further a vision that is in concert with optimal health and the policies that we are looking to make in the future, down the road."

Benefits to Research: Knowledge Generation

As in Case Study 1, the partnership has provided researchers with numerous opportunities to examine key elements of implementation processes and outcomes and to develop strategies to facilitate processes and outcomes. For instance, McKay asserts that the endorsement of her research by OMH was critical to convincing reviewers of an NIH R01 application that she could randomly assign a group of OMH-supported clinics. She further states that OMH "offered us a platform to do a set of research studies, you know, things that you only dream about when you are first starting out in your research career." In one such study, characteristics associated with participation in training in evidence-informed business and clinical practices were examined in 346 outpatient mental health clinics licensed to treat youths in New York State.[45] Clinics affiliated with larger, more efficient agencies and clinics that outsourced more clinical services had lower odds of participating in any business-practice trainings. Participation in business trainings was associated with interaction effects between agency affiliation (hospital or community) and clinical staff capacity. Clinics with more full-time-equivalent clinical staff and a higher proportion of clients under age 18 had higher odds of participating in any clinical trainings. Participating clinics with larger proportions of youth clients had greater odds of being high adopters of clinical trainings. A second study prospectively examined the naturalistic adoption of clinical and business evidence-informed training by all 346 outpatient mental health clinics licensed to treat children, adolescents, and their families in New York State.[46] The study used attendance data (September 2011-August 2013) from the Clinic Technical Assistance

Center to classify the clinics' adoption of 33 trainings. A total of 268 clinics adopted trainings; business and clinical trainings were about equally accessed (82% versus 78%). Participation was highest for hour-long Webinars (96%) followed by learning collaboratives, which take six to 18 months to complete (34%). Most (73%-94%) adopters of business learning collaboratives and all adopters of clinical learning collaboratives had previously sampled a Webinar, although maintaining participation in learning collaboratives was a challenge.

The Present: Systems Improvement

Researchers and policymakers agree that the partnership has been mutually beneficial but that it continues to evolve. According to Bradbury:

> "It serves us because we understand the system better and make better policy decisions, and it helps them because they get to showcase their skills and publish things and get more grants and stuff. So it is mutually beneficial process. I think what has happened with all of the systems change over the last year or two years is that the relationship has gone from mutually beneficial to symbiotic and absolutely positively critical for doing the work that we do. And the level of reliance is just skyrocketed exponentially and the partnership is more like closely intertwined than what it was previously…. So people that you can rely on, that you can trust, that get it, that can be responsive to your needs real quickly and that can help you carry on the vision that you need to achieve in a short period of time, of having them as our partnership has been extremely beneficial, more so now than ever."

COMMON ELEMENTS OF SUCCESSFUL PARTNERSHIPS

Each of the case studies describes a specific model of a successful partnership between researchers and practitioners and/or policymakers. The key to their success lies in the possession of certain elements embedded in the individual participants, the relationships among partners, the organizations represented in the partnership, the environmental context in which the partnership exists, and the cultural systems that govern and emerge from these partnerships. These should not be viewed as mutually exclusive categories. A set of these elements grouped into categories of intrapersonal, interpersonal, organizational, environmental, and cultural characteristics is presented in Figure 2 below.

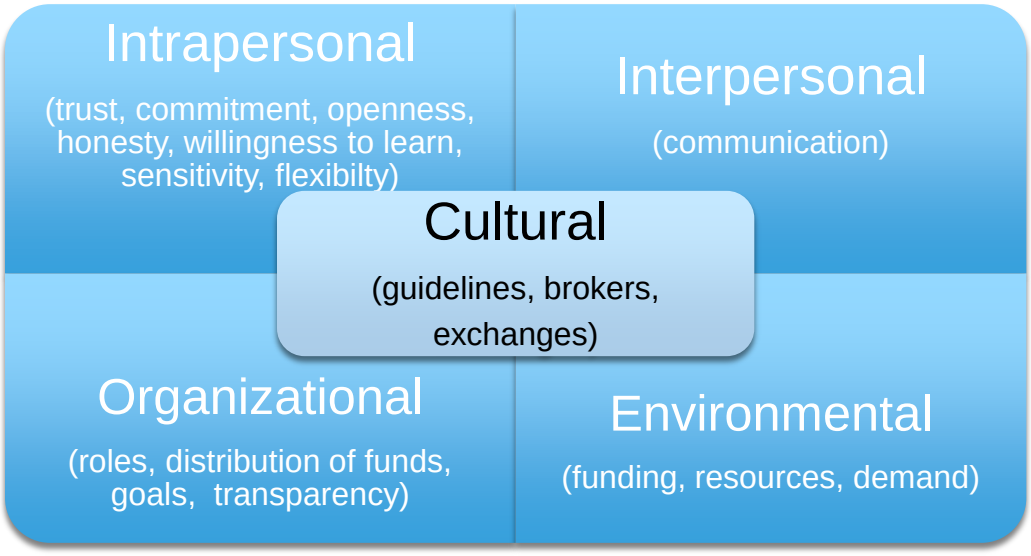
Intrapersonal characteristics

Researchers and practitioners/policymakers alike in all three case studies cited personality characteristics as being the most important ingredients of successful research –practice partnerships. As one community partner observed: "I would just like emphasize, though, that the key to a successful partnership is the personality, and [the research partner's] personality made it work."

Honest and trustworthy The CPBR and related literature suggests that development of trust is one of the most important requirements for successful research – practice partnerships.[26-30, 47-51]

This development is viewed as a requiring commitment, openness and honesty,[47, 49] respect,[27, 49] and a willingness to learn about one another.[18, 38, 39] These elements are also embedded in the three models described above.

Figure 2. Characteristics of Successful Research Practice/Policy Partnerships



Developing trust requires being open and honest. According to a researcher, "Policymakers do not want surprises, so frank conversations about the process and possible outcomes of research activities are discussed openly and often." A similar view was expressed by a policymaker who stated:

> "We're usually the one with the questions, but sometimes [the researchers] might need to tell us "Well we can't answer that" or "we can't answer it that way, but here is what we can do. It is very much of a partnership in that we know we can't get something from them that they're not capable of doing, and they might remind us that "we can't get those answers for you" as much as we would like to know the answer. It is really kind of give and take."

Willingness to Learn. The willingness to learn from one another is another feature of successful partnerships frequently mentioned in the CBPR literature.[26-30] In Case Study 2, an ACS administrator noted the following in speaking of her relationship with the researcher:

> "We were curious and respectful of the other side. I really needed her advice. She is the world-renowned researcher and developer and I really valued our partnership because I am a lawyer. I can't tell you the best way to engage with foster parents and effect behavior change. So I really needed her to do that. Conversely, she is not a lawyer. She couldn't simply do the pilot and handle all the logistics to do that without someone like me. I think we both have a sort of intellectual curiosity to learn more about the other side. I think that was key."

A similarly willingness to learn from research partners was reported by a policymaker partner in Case Study 3:

> "We'll pick their brains too. A couple of months ago the Commissioner here wanted to do a bunch of work on prevention. So one of the things I did was I got the researcher on the phone and said "Okay, tell me everything you know about prevention, in terms of the kids mental health world. So there is always something we can learn from them because the researchers are on the national scene…. They can see trends from other states better than we can because we get tunnel vision from what is going on around here. And family support comes to mind again and again and again because they have seen how family support has become more prominent nationally, and filling the gaps between treatment and support services that we just can't fill. They've been talking to us for a long time now and there is a lot that we have learned from them."

Sensitivity. Willingness to learn from one another is also related to another common element of a successful partnership, which is being sensitive to the needs of the partner and insuring that the partner derives some benefits from the collaboration.[26-30] Those benefits accrue over the course of the relationship even if they are not always evident in any one specific project. One researcher asserted that "Anytime they call you up and want something, you give it to them. That is an absolute rule. *Quid pro quo* is clearly it. You've got to figure out what they're going to get from it, and they'll tell you." Another researcher stated: "We always say yes to the policymakers. We never say no to anything they ask us to do unless it flies in the face of what we have to do for NIH. So far that has never happened. When they say can you help us with this or can you do that, we always say yes and we find a way to make it work."

Sensitivity to the partner also requires an understanding of the factors that motivate a partner. Researchers and practitioners often possess negative stereotypes of each other that are often grounded in differences in organizational culture and previous experiences.[1, 15-19, 37-39] Organizational cultures identify values, priorities, and normative and pragmatic rules for behavior. Although there is considerable overlap in the organizational cultures of researchers and practitioners, there are also important differences. Researchers, who are usually focused on tenure and promotion, give priority to scholarship with its demands for scientific rigor, slow and methodical progress, and publication of results in peer-reviewed journals. Conversely, practitioners are usually focused on meeting the needs of their clients and thus give priority to expediency, efficiency, and client satisfaction. Successful partnerships must struggle to effectively "mesh the different missions."

Flexibility. However, sensitivity is of little value to a partnership unless it is accompanied by a willingness and ability to be flexible. According to one of the researchers, "You have to go with the flow. You can't plan it all out. You have to be ready and willing to jump and respond to their needs as well as your own. It truly is an ad hoc process." Another researcher pointed to the necessity of having researcher participants who are flexible and open-minded: "I don't think this is work for everybody. You've got to be able to be very frank and very honest and not dogmatic." Flexibility is required because research operates in a very dynamic environment and

that changes in the service systems are the norm rather than the exception: "We recognize the difficult environment they [the policymakers] are in," according to one of the researchers. The research partners exhibit similar understandings. Another researcher commented on the need for "flexibility of methods, choosing open source low burden measures, being really careful of design, not disrupting typical service flow, not effecting billing and financing. There are a lot of practical considerations that a lot of researchers don't necessarily take into account, that you need to be really sensitive to."

Nevertheless, being flexible can come at a price. In Case Study 2, the desire by the ACS partners to use the CAFÉ fidelity monitoring system to collect additional data resulted in growing pains for both the researcher and the participating agencies, the latter not having initially been provided with sufficient training to use CAFE. The demands of being flexible were similarly expressed by a researcher in Case Study 3:

> "I do a lot of other things than research with Albany, but they have different needs. If I wasn't a tenured professor, and doing all this training and technical assistance, the applied work that we are then trying to make into research data, I mean it would be very hard. Having said that, I can't really do implementation research unless I grow infrastructure in the state that can handle that. And so I feel like even when I'm doing those other tasks, assuming those other roles, it does help my science because without the CTAC I can't really do the study that we just proposed."

Interpersonal characteristics

Trust. Attention to interpersonal relations is as important to the success of research-practice partnerships as the personalities of individual partners. The two sets of characteristics are closely associated with one another. According to Garland and colleagues[51] "regardless of level of partnership, or underlying structure, collaboration always relies heavily on interpersonal processes, specifically communication and trust building" (p. 519). Identified above as an intrapersonal characteristic, trust must be mutual for a collaboration to be effective.[52-54] Establishing mutual trust, in turn, requires explicit, clear, and comprehensive communication.[49, 51, 54] It also requires a long-term commitment. According to one researcher, the two most important elements of successful partnerships are persistence and trust. "You have to think of it as a long-term relationship. It continues whether you are bringing in money or if you are without money, you just stay in there. It is absolutely built on personal relationships." The relationship between trust and a long-term commitment was echoed by another researcher: "I think that is one of the biggest issues—i.e., having enough time for these frank conversations. I think that is true in any relationship. People have to have enough trust to be able to open up about what they are really worried about. It takes time."

Face-to-Face Communication. The importance of regular, face-to-face communication with each of the major stakeholders was evident in all three case studies. In Case Studies 1 and 3, researchers routinely gave presentations of their findings to their practitioner/ policymaker partners. In Case Study 2, the researcher visited each of the five agencies and listened to their concerns regarding the implementation of the project. This was particularly important as

everyone recognized that the demands on the agencies had been really high "and everybody had respect for the amount of work they were doing." The interactions demonstrated that she was sensitive to those concerns and that their voices would be heard throughout the implementation. It also provided researchers with an opportunity to identify potential barriers to implementation and solutions for overcoming these barriers. ACS also demonstrated a willingness to listen to the agencies to address their concerns. In Case Study 3, a researcher stated: "We have deeply invested in relationships in the key decision makers in Albany. I am there a lot. Sometimes you think I work for Albany. Sometimes I have been in Albany for a few days. I'm sure I work for OMH too… The depth of these personal and professional relationships, I think that has made this possible."

Organizational characteristics

Clarity of Role. Perhaps the most important organization-level element is having a clear understanding of one's role in the partnership. Partnerships function by virtue of the willingness and ability of different partners to assume specific roles.[1, 26-30] For instance, in Case Study 2, ACS made clear what decisions the researcher was responsible for. In trying to be responsive to both ACS and the agencies, the researcher also learned to avoid being the mediator between the two as that was not her role: "I had to be careful not to overstep. I learned to stay in my lane." In contrast, one of the researchers involved in the partnership described in Case Study 3 explained that

> "[New York] State turns to us for solving some of their problems because… we are in a semi-independent position where we can tell the clinics on the ground that 'we're here for you'. Our philosophy is that we are here to help you [i.e., the clinics]. On the other hand, we can turn to the State and ask 'what do you need help with? How can we help you with the next set of policies? How can we help you by talking to the clinics?' We have this interesting relationship with both the clinics on the ground and with the State. We are semi-independent from both, but we can be in a very supportive and helpful role to each."

In Case Study 1, although the director of the child welfare system wanted CASRC investigators to discuss the implications of these findings for service delivery, the director of the research center believed it was not appropriate to attempt to predict beforehand how agencies would use the findings.

> "I did operate on a principle that although we could tell them what we found, I did not feel we could tell them how to use it. My own view was that none of the researchers were nearly as expert as the managers in the child welfare service. I tried to keep to the principle that we were not there to tell them what they should do or what the implications of the study were for their practice and policy. Our job was to conduct the best study that we could and be very accessible to them to report to them."

Lack of clarity in assignment of roles and responsibilities can lead to assignments not being completed, tasks not being performed, uncertainty, confusion, and conflict. The obvious solution

to addressing this challenge is to assign roles based on skills and resources. Thus, academic partners may assume responsibility for research design, ensuring quality control of data collection, data analysis, training and supervision, and fidelity monitoring, whereas practitioner partners may assume responsibility for service delivery, including staffing, scheduling, and financing. However, roles may be assigned based on other considerations. For instance, leadership of the partnership may be assigned to systems leaders, agency directors, or intermediaries who can gain the support of both researchers and practitioners. Partners may also assume different roles at different stages of the partnership to support different goals (e.g., different phases of EBP implementation).[26-30] Protocols that document these roles and functions are highly recommended.[55, 56] Roles may also be assigned for the purpose of political expediency. For instance, a community partner may be assigned a role with greater visibility in order to secure community confidence and willingness to participate.

Leadership. One of the most important roles essential to the success of a partnership is that of the leader. Although co-leadership is often viewed as a key ingredient of a successful partnership, how leadership is exercised may vary depending on the purpose of the partnership (i.e., to generate or disseminate knowledge, to conduct research or provide technical assistance) or the stage of partnership development (e.g., transitioning from leadership by the researcher to leadership by the community[27]). In Case Study 2, both the researcher and the policymakers viewed the relationship as a partnership, but one where ACS exercised authority over the implementation of CSNYC According to an ACS administrator:

> "It wasn't totally co-led because [the researcher] could not have done any of this without us driving it. But we knew we could not succeed unless we were getting her advice on lots and lots of stuff. We would never tell her to do something without asking to make sure that she was good with it, that it was consistent with the models that was going to work for her, the schedule or whatever it was, you know what I mean? She could not have just come in and done it at all and not have it be driven by us. The agencies had to be told by us to do things. She could not tell the agencies to do anything. We gave her the authority to hold the line with the community agencies."

With respect to the partnership with County Behavioral Health Services in Case Study 1, an agency administrator stated that he felt like a co-equal with the researcher. He further noted this status was critical to the success of the partnership. Neither the researcher nor the policymakers were considered to be the primary leaders of the partnership. However, each member of the partnership assumed a particular role and set of responsibilities. For instance, the BHS administrator noted that the policymakers were not very good at formulating research questions or pursuing answers in a scientifically rigorous manner; that responsibility was left to the CASRC investigators.

Culture Broker. Another important role required for a successful partnership is that of a culture broker.[1, 15, 37, 47] Community partners must play an active role in translating the relevance of the science and the need for rigorous methods to stakeholders at all levels.[1] This role is usually assumed by an individual with research, practice and policy experience who serves as an intermediary or broker between partners. These individuals assume the role by virtue of their

understanding of the organizational cultures of the different partners as well as interpersonal characteristics of sensitivity and honesty and the interpersonal characteristic of communication. In Case Study 1, the staff of the San Diego County child welfare services and behavioral health services who whose salaries were paid, in part, by CASRC research grants assumed the role of brokers between CASRC researchers and agency leaders and practitioners. In Case Study 2, the researcher assumed the role of intermediary between the ACS senior leadership and case managers employed by the five participating agencies. According to a community partner:

> We could talk with [the researcher] and talk about how we wanted to do stuff with agencies together and she would implement it. She had really important information. She was working on the ground with the agencies and training them and all their staff in ways that we just weren't. She was getting critical information on different aspects of implementation that would have been very hard for us to get. Conversely, there were just things we wanted to accomplish that we had to work with her to figure out, like how are we going to get what we wanted.

Distribution of Resources. Another common element of successful partnerships is the distribution of funding and resources in such a way that is acceptable to all stakeholders.[1, 49] For instance, the director of the research center in Case Study 1 strived to insure that community partners receive some monetary benefit from the partnership. Although the child welfare partner stated at the outset that her agency had no interest in receiving funding to participate in the project, the researcher included in his proposal a full-time position in the mental health agency to support research-related activities. He also made it clear to both partners that he was not interested in obtaining funds from them to conduct research activities. Wishing to ease the burden of participation on his partners, the researcher had a principle of bringing money to them but not accepting money from them. A community partner also stresses the importance of availability of funding to support the community partners, citing as an example his involvement in a project led by researchers:

> "The National Institute of Mental Health at that time was very interested in funding these kinds of partnerships. And they had service dollars in these grants. So they had research and service dollars and the funding sources being able to provide both was very, very critical. That project was very successful and very equal. We walked hand in hand. And so much of that had to do with the fact that we were getting research dollars and service dollars. That was very critical."

Clear Goals. According to the principles of CBPR, it is also critical that the partners have clear, well defined, and measurable goals.[26, 27, 29, 30] In Case Study 2, the Agency for Children's Services had a benchmark or target for each one of their desired outcomes. According to the researcher, "I think without that level of clarity, there is a lot more opportunity for drift. I think that at the leadership level, I would say that ACS really had their act together. I had never worked with a project with that level of clarity before. They kept it simple; it was straightforward; it was measurable." According to the community partner, "We knew what our goal was. Our goal was to improve outcomes for children and families. Our goal was to expedite

reunification and thereby reduce length of stay in foster care. We wanted our services to be much more intensive, much more high quality, and get them out quicker."

Written agreements that outline goals, roles, privileges and rules of engagement are considered a critical element of all research-practice partnerships[26-30, 49] In all three models, these items were formalized through contracts and memoranda of understanding. However, even with written agreements, some flexibility is required, as noted earlier.

Sensitivity. Successful partnerships require not only intrapersonal sensitivity to the needs of the partner; they also require organizational-level sensitivity to potential tensions and conflicts within participating organizations. For instance, a researcher in Case Study 1 noted that the issue of ethnic/racial disparities arose early in his relationship with the San Diego County child welfare system. Many of the African American case managers were reluctant to participate in the NIH-funded study out of concerns that it would merely reinforce stereotypes regarding poor parenting and bad behavior of youth in African American households. Another CASRC investigator knew many of the case managers and suggested that a meeting be held with them to address these concerns. At this meeting, the researchers acknowledged that they could not guarantee the results would not reinforce those stereotypes, but that they would be sensitive to the implications of such findings. They also asked the African American case mangers if there was anything they could help them with. The ensuing discussion revealed that the case managers could benefit from CASRC assistance in using data to make a case for the existence of disparities in services received. Ultimately, the stalemate was resolved and the study was conducted with the participation of the African American case managers.

Environmental Characteristics

The fourth set of characteristics that support and sustain successful partnerships resides in the external environment. A key element to all three models of successful partnerships was the availability of adequate resources to support and sustain the partnership. In Case Study 1, the partnership between CASRC investigators and county youth-serving systems was supported and sustained by the availability of funding from the National Institutes of Health to conduct research and by the demand for high quality services from clients and community leaders. In Case Study 2, the long-term relationship between the researcher and the Administration for Children's Services was impacted by the change in administration in New York City in 2013. In Case Study 3, the partnership between NYU researchers and OMH is supported and sustained by the availability of funding from the National Institutes of Health to conduct research and funding from the state to provide technical assistance in implementing EBPs. As with Case Study 1, this partnership is also sustained by the demand for high quality services from clients and state-level leadership. The data infrastructure currently being supported with funding from NIMH will need to be supported by the State once the Advanced Center funding has come to an end. To accomplish this, the research leader admits that she will need to communicate clearly the value of maintaining the infrastructure and its importance to supporting policy-relevant decisions.

Successful partnerships, therefore, require both a supply of funding and other resources from sources external to the partners on the one hand, and a demand for the research and technical assistance from services consumers and policymakers on the other hand. It also requires

flexibility in adapting to changes in the environment. The research leader in Case Study 3 noted that ever since she assumed her position at OMH, there have been three different Commissioners and three Deputy Commissioners for Children's Mental Health. "The state mental health system itself is changing in major ways. One of these changes is that services for low income populations will be moved under managed care. Most of what we are trying to do is stay on top of these changes." One of the OMH partners also noted the impacts of a rapidly changing environment:

> "Things are changing so rapidly now. [We] sometimes joke that we create this concept or something that we are going to put out for bid and it takes so long for that process to manifest itself that by the time we are ready to post the RFP, everything has changed about it and we want to do something different. Certainly [the researchers] have found themselves experiencing that first hand. By the time we conceive of something and get ready, it is different. It has to be different because there are different pressures…. And I think in the past, it didn't change that rapidly, and now it changes quickly."

Cultural System Characteristics

Shared Understandings. A final set of characteristics common to all three models resides in the cultural systems, the sets of shared understandings that both govern and arise from these partnerships. The importance of having partners with shared understandings about research was evident in all three case studies. Community partners in all three case studies asserted there was no need to manage researcher expectations because "the relationship we had with them was a mature relationship; it was professional. They didn't come at us with 'we should do this or that'." In Case Study 3, community partners expressed a preference for working with researchers with a clear understanding of the constraints on as well as the potential of child mental health services research. As one of these partners explained:

> "I think, just thinking about [the researchers] as individuals, what I find so valuable in them is that they have a really good understanding of what we deal with in state government because one of them actually works for us. She has been part of that policy environment. [The other researcher] has also been, but not on the government side, more in the private sector in human services, has been involved in policy and implementation. And so I think they both have a really good handle on the day to day stuff that we deal with and what would be useful to us and what is not useful to us…. What sets [the researchers] apart is that they really get it. [We] don't really have to explain what we are dealing with and what we need. They get it pretty immediately, and the products they deliver to us as a consequent are very relevant and useful."

Another policymaker partner observed that the researchers "are also practitioners with a good sense of what is a thing that is important foundationally for clinicians to know and what is integral to standard practice, to be able to make sure the outcomes are positive."

In addition to sharing common understandings of the research, practice and policy environments, the partnership itself must contain certain types of knowledge critical to achieving the partnerships goals and objectives. For instance, in Case Study 2, an agency administrator expressed the need to partner with researchers and treatment developers who have a firm grasp of the requirements for successful implementation of evidence-based practices.

> I think that having folks who are really thought through the implementation steps is really key. I've talked to a number of developers who have these models and they are just going to come and train and they have no interest in understanding how it is going to end up working on the ground or how to know if people are going to retain the information, how to know if they are actually using the model with their clients, like all the fidelity piece…. And the other piece beyond the clinical fidelity piece is helping agencies figure out bigger pieces of how to support the model. Having a researcher understand what it takes for staff.

Common Values. Partners must share a set of common values. In Case Study 3, for instance, an OMH administrator made the following observation about her research partners:

> "And they all want to do it for the right reasons. We come from different backgrounds. We have a different focus. We all do it for the same reasons. And I have no doubt that [the researchers] absolutely care about kids and families. They just want to do what they can to make it better. [We] do our thing here and they do their thing there and we bring it all together. They really, really care. Whereas maybe other people care, they have a pure sort of care about research and the value of research, and being published and that sort of thing. And there is nothing wrong with that, but it doesn't always work well with the kinds of things that we are trying to do."

Cultural Exchange. Effectively creating and sustaining a common set of knowledge, attitudes and beliefs requires an individual or individuals to assume the role of a culture broker. A researcher in Case Study 3 states that it is critical to respect the different epistemologies, values and drivers of the policy world and the science world. She finds herself doing "a lot of translating back and forth and helping people acknowledge and understand and respect each other's points of view." In those instances where the two worlds diverge, "as long as there is honesty and transparency, then you can find that sweet spot." That sweet spot is grounded in the overall goal of the partnership. This same researcher stresses the importance of "really keeping your eye on the bigger picture as to why this joint work is important. We, the policymakers, family advocates, the researchers, are all doing this work for kids and families. We're really all about that. We have the same mission. Once you see that, it is very easy to do this as a partnership." This viewed is echoed by another researcher: "I think that what we have to do as academics is really translate what I said into things that are meaningful and easy to understand than the science, than some of our academic products."

Nevertheless, the culturally influenced knowledge, the attitudes and behaviors governing these partnerships are not static, but evolve as a consequence of the interactions among partners, leading to various forms cultural exchange. In Model 1, a community partner pointed to a

greater acceptance of the importance of research in public service systems: "I think pretty much across the board the value of research is now accepted, as opposed to the early days. We had no dialogue. There was absolutely no relationship at all." For their part, CASRC investigators were provided with the opportunity to learn about how public youth-serving systems operated and both the opportunities and limitations to delivering evidence-based interventions to youth within the framework of these systems. As the Center director explained, "everything I know about child welfare and child mental health, I learned from working with these systems. Before coming to San Diego, I had worked entirely with adults. I knew almost nothing about working with kids." In Case Study 2, the cultural exchange was evidenced by a willingness of researchers and policymakers to learn from one another, as noted earlier. In Case Study 3, partners commented on the transformation of expectations resulting from the partnership. According to one of the researchers,

> "it is important to communicate these constraints and opportunities to researchers outside of our Center who are unfamiliar with services research. I spend a lot of time explaining what is services research, how and why it is scientific, and how you can get rigorous results. As for rigor, there are certain things you just cannot compromise. I am pretty clear in my own head of where those boundaries are and where there is room for maneuverability."

At the same time, one of the most important challenges faced by one of the partners in Case Study 3 in her role as researcher-policy broker is dealing with expectations of practitioners who participate in research studies. Especially when conducting randomized controlled trials,

> "We have to explain that we can only help half of you in this way and the other half we need for a comparison. That takes additional time and explanation as to why we need this comparison and what will be gained from it and what the comparison group will get later. So there is a lot of time spent in managing expectations. Another set of expectations you have to manage is around the fact that you don't know in advance what the data will show. We have had to be very clear with our family advocates, for example, that frankly we do not know if this is going to work or not. We think it will work, but it is possible that it won't. We have to prepare them in the eventuality that there is a null finding or a negative finding."

Change. However, these partnerships also result in more profound changes in knowledge, attitudes and behaviors, As one researcher noted about her partnership with OMH and the research resulting from that partnership in Case Study 3,

> "I have a huge appreciation for the gap in how scientists think about service and how families think about what they need and what providers actually need to do when they are providing the service. There is this gigantic gap between these stakeholders and I think many academics are not spending much time out in the field. Thinking about how you pay for this service, how does it fit in with EPT codes and managed care. I think those are on my mind a lot. I think also, you

know, many times families are looking for something that is quite a bit different from some of the things that are being offered. I am deeply appreciative now of the kind of bridge functions that we really need to play. We have the bridge between providers, organizations and families, with policymakers and academics. We still have pretty big gaps. We have to work together and understand each other. I'm more humble than anything else."

IMPLICATIONS

The common elements identified from the three case studies by no means capture all of the key ingredients of a successful research-practice partnership in child welfare and child mental health. Other ingredients include adherence to scientific rigor,[29, 30, 58, 59] the ethical conduct of research,[29, 60] and balancing local relevance with scalability.[29, 30] The common elements are also not unique to research-practice partnerships in child welfare and child mental health. For instance, developing trust, maintaining effective communications, sensitivity to the priorities of researchers and practitioners, and possession of adequate resources are also common elements of successful educational research-practice partnerships at the district level.[63]

Nevertheless, the common elements identified in these case studies reveal certain themes that characterize successful research-practice partnerships in general and in child welfare and child mental health in particular. The theme of flexibility is illustrated at the intrapersonal, organizational, and environmental levels and suggests that for partnerships to be successful, there should be an expectation that no one individual, organization, or environmental context remains the same for long. Partnerships should be prepared to respond to changes at all four levels if they are to survive.

The ability to respond to such changes, however, requires a certain degree of sensitivity, a second theme linking these common elements. This includes an awareness of the needs of individuals and the organizational cultures they represent. It also includes an awareness of features of the organizations and the external environments that may create constraints on or present opportunities for partnerships.

A third theme illustrated by the common elements is clarity. This theme is evident in the intrapersonal element of openness and honesty associated with building and maintaining trust, with the interpersonal element of communications, and with the organizational elements of role definition and clear and measurable goals.

A fourth theme is mutualism. This theme is illustrated in the intrapersonal elements of sensitivity and humility and tolerance, the organizational element of equitable distribution of funding, and the cultural element of shared understandings.

A fifth and final theme is one of teaching and learning. This theme is illustrated by the intrapersonal element of learning from experience and from one another, the interpersonal element of communications, and the organizational element of culture brokers, and the cultural element of cultural exchange. Successful research-practice partnerships in child welfare and child mental health are learning organizations,[61, 62] where members are constantly learning from

and instructing one another. This includes learning specific skills like methods of data collection and analysis to learning about the values, understandings and behaviors that characterize the organizational cultures to which partner members belong. In the partnerships characterized in the case studies, the culture broker plays an especially important role in teaching and learning because this individual is uniquely suited to translating and facilitating the exchange of knowledge that is critical to a learning organization.

CONCLUDING THOUGHTS

A successful and sustainable research-practice partnership builds upon the existing organizational cultures of research and policy/practice. However, it is not merely an aggregation of these cultures but rather the product of their transformation resulting from the exchange of understandings, values, attitudes, and rules for engagement that occur between researchers, practitioners and policymakers. This exchange occurs through a process of debate and compromise. It requires identification of points or areas of convergence and divergence and a willingness to either eliminate or accommodate the latter. It assumes that there is mutual self interest in learning how policymakers and practitioners view research and how researchers view policy and practice. It also requires an ability to communicate using a common language and a willingness to collaborate and compromise.

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