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Evaluation of Mental Health Consultation in Child Care Centers

Abbey Alkon,^{1,4} Malia Ramler,² and Katharine MacLennan³

Mental health professionals have speculated that their consultation services should improve the overall quality of a child care center, but few research studies have shown this effect in child care settings. In the present study, mental health consultation services were provided by four agencies to 25 urban child care centers to enhance children's emotional lives and social abilities, and to strengthen child care center staff's capacity to work with children who have difficult behaviors. A one-year evaluation was conducted to assess the impact of the mental health services on the teachers and child care centers using observational measures, director- and teacher-completed questionnaires, and qualitative focus group data. Centers with more than one year of consultation showed increases in overall quality, teachers' self-efficacy, and teachers' competence. In addition, staff expressed satisfaction with the mental health consultation services provided. Implications of findings and suggestions for future interventions are discussed.

KEY WORDS: child; mental health; child care; evaluation.

INTRODUCTION

One in every five preschool-age children has some behavioral or emotional problems (Earls, 1980; Luk, Leung, Baconshone, et al., 1991; Pavuluri, Luk, & McGee, 1995) and 8 in every 100 children have a diagnosed psychiatric disorder (Psychiatry, 1988). Several studies show that preschool children with persistent behavior disorders continue to have problems into later childhood (Campbell & Ewing, 1990; Egeland, Kalkoske, Gottesman, & Erikson, 1991; Koot & Verhulst, 1992). Further, research has demonstrated that interventions with preschool-age children can change the prevalence of behavior problems in later childhood and adolescence (Pavuluri, Luk, & McGee, 1996; Yoshikawa, 1994). Many professionals believe that the earlier the intervention be-

gins, the better the prognosis (Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, & Services, 2000).

Teachers in child care centers and family day care homes find the most challenging work is with children who exhibit behavioral and/or emotional problems (Mark-Wilson, Hopewell, & Gallagher, 2002; Raver & Knitzer, 2002). There is more attention, recently, on the increased prevalence of mental health problems of young children (NIMH Prevention Research Steering Committee, 1996). In 2002, there was an increase in the number of young children being referred to mental health professionals for severe aggression (Mark-Wilson et al., 2002), and a survey of child care programs in Michigan found that two percent of the children in these programs were expelled for "problem behaviors" (Center for Mental Health Services et al., 2000). Thus, there is a need to foster linkages among the child care and mental health professionals to support child care teachers working directly with children at risk for behavioral and emotional problems and to encourage referrals for children and their families to mental health professionals (Center for Mental Health Services et al., 2000; Knitzer, 2000). Mental health consultation services in child care facili-

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ties may enable the child care staff to incorporate a mental health perspective, including developmental, family, and cultural needs, to assess children at risk, provide appropriate interventions, and prevent behavioral and emotional problems in the future (Knitzer, 2000; Lieberman, 2000; Raver & Knitzer, 2002).

Mental health consultation has been defined as “a problem-solving and capacity building intervention implemented within a collaborative relationship between a professional consultant with mental health expertise and one or more individuals with other areas of expertise, primarily child care center staff” (Center for Mental Health Services et al., 2000, p. 4). Consultation aims to increase the ability of staff, families, programs, and systems to prevent, identify, treat, and reduce the impact of mental health problems among young children in child care settings. With these goals in mind, consultants assist staff to understand a mental health perspective and incorporate it into their work. Staff are encouraged to use their own roles, skills, and experiences to carefully observe children, enhance children’s learning experiences, promote the social and emotional development of each child, build relationships and communicate with parents, and seek further consultation when necessary (Center for Mental Health Services et al., 2000; Yoshikawa & Knitzer, 1997).

Mental health consultation to child care centers can be child centered, programmatic, or a combination of both. Child-centered consultation addresses the individual child’s difficulties by engaging them, and sometimes their families, in direct clinical services. The child care staff identify a child they have concerns about and then the consultant conducts an assessment and develops a plan to address the factors that contribute to the child’s difficulties in the child care setting (Center for Mental Health Services et al., 2000; Weiss & LaRoche, 1989). Programmatic consultation focuses on improving the overall quality of the program. These consultation services may be in response to a teacher’s concern about an individual child, in addition to addressing programmatic structural issues that impact teachers’ abilities to build stable, responsive relationships with the children in their care. Combined programs provide consultation that focuses on both programmatic and child-oriented services.

Three important factors in the success of mental health consultation intervention programs are the self-efficacy of teachers with regard to mental health issues, staff stability, and overall child care center quality. Since child care staff are an integral part of the process, their sense of confidence in their ability to accurately assess and to care for young children can impact the quality of

their work. Studies of self-efficacy showed that students in elementary school had higher academic achievements if their teacher had high self-efficacy (Gibson & Dembo, 1984; Greenwood, Olejnik, & Parkay, 1990). Also, a lack of staff stability, as reflected in high teacher turnover rates (Whitebrook, Howes, & Phillips, 1998) can impact significantly the social and emotional development of the young children in the child care centers. Low self-efficacy can contribute to high turnover. According to Bandura’s self-efficacy theory “judgments of self-efficacy are based on several kinds of information including performance accomplishments, vicarious experiences through observing the performance of others, and verbal persuasion that one possesses certain capabilities” (Bandura, 1977). Successful mental health consultation programs that aim to improve teachers’ self-efficacy should focus on both the child care teachers’ attitude toward the program (Stein & Wang, 1988) and their belief that they can perform the necessary activities to achieve the expected outcomes (Gibson & Dembo, 1984).

The quality of child care programs can also be enhanced by a mental health consultation program. High quality child care centers have child care teachers with more years of formal education, higher wages for staff, and lower teaching staff turnover rates, lower ratios of children to staff, and better adult work environments than low quality centers (Whitebrook, Howes, & Phillips, 1989). Staff instability has been highlighted in the National Child Care Staffing Study (NCCSS), which showed that 27% of child care teachers left their jobs during the past year (Whitebrook et al., 1998). High teacher turnover rates affect the socioemotional development of the young children in child care programs. Mental health consultants can provide additional education for staff, improve staff communication, and increase the morale among staff, which effect the overall quality of a child care facility.

The purpose of this study was to describe and evaluate four mental health consultation models by addressing the following research questions:

1. What are the most common activities provided by mental health consultants in child care centers?
2. Does mental health consultation improve child care teachers’ level of competence?
3. Is the duration of mental health consultation services associated with teacher turnover, center quality, or teachers’ self-efficacy?
4. Does the duration of mental health consultation services in child care centers and teachers’ level of competence predict improvements in child care quality? and
5. How are the mental health consultation services received and accepted by the child care teachers and directors?

METHODS AND PROCEDURES

Intervention

In 1995, The Miriam and Peter Haas Fund began the Early Childhood Mental Health Initiative (ECMHI), which supported mental health professionals from four different agencies to provide mental health consultation and services to more than 40 urban child care programs serving low-income, ethnically diverse children 2 through 5 years of age in San Francisco, California. In 1997, the Fund supported a 2-year evaluation of the Initiative. The goals of the Initiative were to enhance children's emotional lives and social abilities and strengthen child care center staffs' abilities to work with children who have difficult behaviors⁵. Although each program had its unique approaches and philosophies, they all offered core mental health services that provided supportive consulting relationships between a mental health professional and child care center director and staff. The evaluation was designed to identify the overall effect of the four intervention models and not to compare or contrast the models. The primary difference between the intervention models was variation in intensity of service, specifically, how often the consultant spent time at the center and the number of centers served. For example, one program had one consultant for 20 centers, while another program had one consultant for five centers.

Study Design and Participants

A 2-year evaluation study of the ECMHI was conducted in 25 urban child care centers. Fourteen centers had not received mental health consultation services prior to this study, and the other nine centers received prior mental health consultation services, ranging from 1 to 7 years. There were two data collection times (Time 1, Time 2), one year apart. Participants in the study included managers of the mental health agencies providing the mental health consultation intervention ($n = 4$), child care directors ($n = 25$), and all the teachers ($n = 188$ year 1, $n = 199$ year 2) working at participating centers. The teachers ($n = 83$ year 1, $n = 54$ year 2) who completed questionnaires were invited to participate in focus groups.

Procedures

At the beginning of the study (Time 1), 1-hour interviews were conducted with the managers of the men-

tal health consultation service programs and child care center directors to discuss their goals and expectations about mental health consultation services in their child care centers. Additional data collected at Time 1 included director interviews, center observations, teacher and director questionnaires, and focus groups with teachers. Teachers were mailed questionnaires and asked to complete the forms and return the questionnaire in a stamped return envelope. All teachers who completed the questionnaires were invited to participate in focus groups. Focus groups were conducted in the early evening and included dinner and monetary compensation for the teachers' time. Center observations were conducted by trained research staff who completed standardized measures of the quality of the child care center environment using the *Early Childhood Environment Rating Scale* (ECERS; Harms, 1980). Observations were conducted in one classroom in each center.

At Time 2 the same data collection procedures were repeated, in addition to a new questionnaire completed by teachers and directors (Goal Achievement Scale, GAS), focus groups for mental health consultants, and qualitative interviews of three case studies. The focus groups for consultants and case studies are not reported in this article.

Instrumentation

At the outset of the evaluation, program managers from each of the mental health agencies were interviewed and asked to describe the anticipated benefits and outcomes for teachers, children and families, and the child care center environment. Child care center directors were interviewed to collect general information about the center demographics, including characteristics of the staff and families served, number of classrooms, and number of staff. In addition, at the start of the study, directors described their goals for mental health consultation and how they hoped it might impact their staff, their centers, and the children and families they served. For those centers who were already receiving mental health consultation services, the directors described the kinds of services and activities provided by the mental health consultant. The director interview at Time 2 was similar except that directors described what, if any, impact the last year of mental health consultation services had achieved.

Demographic questionnaires completed by directors and teachers included information about their educational background, ethnicity, age, and length of time in the child care profession. Other information included in the questionnaire was their prior experience with

⁵The Miriam and Peter Haas Fund, 1996. *Mental Health Approaches in Early Childhood Settings*, Miriam and Peter Haas Fund, San Francisco, CA.

mental health consultation services, the number of children in their care that they were worried about, and turnover rates.

A Consultant Activity Survey was developed for this study to determine the types and frequency of activities involved in the mental health consultation intervention (Table II). The survey was completed by directors and teachers at Time 1 and Time 2. Each item was marked if the activity was provided by the mental health consultant at their respective center during the last 12 months. The 11 items were rated as Yes or No in Time 1 and frequency (0, 1–2, 3–5, 6+ times) in Time 2.

Teachers completed a *Teacher Opinion Survey* (TOS; Geller & Lynch, 1999), a 13-item scale of teacher self-efficacy designed to assess teachers' feelings of confidence and competence in managing challenging behaviors and their ability to make a positive difference in the lives of children. The items are rated on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The alpha coefficient for the 13 items is 0.66.

At Time 2, the GAS was administered to child care directors and teachers to measure teachers' competencies on general mental health activities or program goals (Table III). The GAS was developed from goal statements generated by the initial interviews with the four mental health service agency managers. From their responses, 14 consensus goal statements were developed and reviewed with all of the mental health consultation providers across the four program models. Each item was rated to the phrase "Mark the column that indicated how you feel about each statement compared to one year ago." Response choices were either (0) not at all, (1) somewhat, or (2) very much. The instruments varied slightly for directors and teachers; directors completed the items as written in Table III and teachers' items had the word "I" instead of "teacher." In this study, the operational definition of "teacher competencies" was the teacher and director scores on the GAS.

Two-hour classroom observations were conducted by trained researchers in one classroom per center at Time 1 and Time 2 to assess center quality using the ECERS (Harms, 1980), a commonly used measure of general child care quality. The scale consists of 37 items rated on a 7-point Likert scale (1 = poor quality, 3 = adequate quality, 5 = good quality, 7 = excellent) and covers personal care routines, furnishings and displays for children, language reasoning experience, fine and gross motor activities, creative activities, social development, and adult needs. The research staff obtained over 90% inter-rater reliability on the ECERS observational instrument before data collection started.

To collect qualitative data about the child care teachers' experiences with the program, focus groups were conducted with teachers at Time 1 and Time 2. The focus group facilitator used a structured discussion protocol. The focus groups were audiotaped and transcribed. At Time 1, the groups discussed what kind of support they needed, their goals and expectations for working with a mental health consultant, and what kinds of behaviors and issues were troubling to them. At Time 2, the groups discussed their experience of working with mental health consultants, what they had gained, and what they would have liked to be different about the experience.

Analyses

Descriptive statistics were conducted on all the questionnaires to summarize the data. Teacher and director turnover rates were calculated as the number of staff present at Time 2 and Time 1 divided by the number of staff at Time 1. Mean scores were calculated to summarize each centers' ECERS score, Consultant Activity Survey, TOS, and GAS. Pearson product moment correlations were conducted to study the bivariate relations among continuous variables. Change scores were calculated for teachers' self-efficacy and center quality (Time 2 – Time 1). Positive change scores reflect an improvement in self-efficacy or center quality.

A regression model with change in center quality (ECERS) as the dependent variable and mean GAS and years of mental health consultation as the independent variables was analyzed. The mean ECERS scores were standardized within each time period.

Qualitative analyses included a content analysis of the full text transcripts for each focus group. After the text was transcribed and coded for themes, comparisons were made between the focus groups' themes from Time 1 and Time 2.

RESULTS

Participation Rates

The four managers of the mental health agencies were interviewed at the beginning of the study and at the end of year 2 (or Time 2). Twenty-five child care centers enrolled in the evaluation study. Nine of these centers were already receiving mental health consultation services funded by the Haas Fund's ECMHI when the evaluation started. Although the Initiative included new centers over the 2-year study period, no new centers were enrolled during the evaluation study. Two centers dropped out of the study by Time 2.

At Time 1, 25 directors, and at Time 2, 23 directors were interviewed and completed questionnaires. Eighty-three out of 188 teachers (44% participation rate) completed the demographic questionnaire at Time 1, and 54 out of 199 teachers (27% participation rate) completed questionnaires at Time 2. An unduplicated count of teachers at Times 1 and 2 shows that 109 teachers returned questionnaires. Of these teachers, 36 completed questionnaires at both Time 1 and Time 2. At Time 1, 37 teachers participated in the four focus groups; at Time 2, 28 teachers participated in three focus groups.

Descriptive Data

The teacher demographic questionnaires were completed by a total of 109 teachers at Time 1 or Time 2 (Table I). The majority of teachers were female and the distribution of age, ethnic background, and education varied across all the categories. The teachers worked an average of 9.5 years in child care and 6.4 years at their present center. Other data summarized from the instruments are that mental health consultation was present at the participating centers for an average of 2 years, ranging from 0 to 7 years. The average ECERS scores was

Table I. Teacher Demographic Data
(*N* = 109 teachers Time 1 or Time 2)

Demographic Information	Percent	<i>N</i>
Gender		
Female	93	100
Male	7	8
Age		
< 30 years	20	21
30–39 years	27	29
40–49 years	33	35
50 + years	20	22
Ethnic background		
Asian/ Pacific Islander	39	41
African American	24	26
European American	19	20
Hispanic, Latino	12	13
Other groups	6	6
Educational level		
High school/GED	38	38
Some college	20	20
Bachelor's degree or more	42	42
Child care education		
Less than 12 ECE units	20	19
12 or more ECE units	44	42
Child Care Permit	36	35
	Mean (<i>SD</i>)	<i>N</i>
Years worked in child care field	9.5 (7.7)	103
Years worked at this center	6.4 (6.5)	107

Table II. Mental Health Consultant Activities
Reported by Child Care Directors and Teachers (Time 2)

Consultant Activity	Directors		Teachers*	
	<i>N</i> = 23	Percent	<i>N</i> = 56	Percent
1. Observing children	23	100	55	98
2. Consulting with director	21	91	53	95
3. Consulting with individual teachers	21	91	47	84
4. Meeting with individual families	21	91	49	88
5. Participating in staff meetings	20	87	52	93
6. Consulting with groups or teams of staff	19	83	48	86
7. Meeting with individual children	15	65	42	75
8. Modeling appropriate behavior management techniques	12	52	—	—
9. Conducting parent support or education sessions	9	39	31	55
10. Training staff	8	35	39	70
11. Conducting therapeutic play groups	6	26	24	43
12. Other services	11	48	9	16

*The 56 teachers represented 16 centers.

4.7 (*n* = 25 centers) and 4.5 (*n* = 23 centers) at Time 1 and Time 2, respectively. The average TOS score was 3.5 and 3.9 at Time 1 and Time 2 respectively. The teacher-completed instruments (Consultant Activity, GAS) were aggregated by center, except for the TOS. There was a statistically significant increase in the TOS scores from Time 1 to Time 2, $t(df) = -4.6(35), 0 p < .05$.

Mental Health Consultant Activities

The most common activities provided by the mental health consultants (Consultant Activity Survey) at Time 2 are listed in order of frequency in Table II. The most common consultant activities are (a) observing children, (b) consulting with director, (c) consulting with individual teachers, (d) meeting with individual families, (e) participating in staff meetings, and (f) consulting with groups or teams of staff.

There were positive reports on the teachers' competencies based on the mental health consultation goals (GAS; Table III) at Time 2. Additionally, the teachers reported an improved understanding of children's difficult behaviors and social and emotional development as well as how to work more effectively with parents. Teachers felt the lowest level of change in their knowledge about and comfort referring children and families to mental health services, and the next lowest levels of change in their work environment, degree of supervi-

Table III. Goal Achievement Scale: Frequency of Teacher and Director Responses Regarding Teachers' Competencies (Time 2; in percentages)

	Compared to One Year Ago, ... Teacher (<i>N</i> = 54)			Compared to One Year Ago, ... Director (<i>N</i> = 23)		
	Very Much	Somewhat	Not at All	Very Much	Somewhat	Not at All
1. Teachers have an improved understanding of children's social and emotional development.	67	31	0	38	52	9
2. Teachers are more likely to try to understand the meaning of children's behavior.	70	27	2	48	43	9
3. Teachers are doing a better job of managing children's difficult behavior.	52	44	3	48	43	9
4. Teachers are more likely to respond appropriately and effectively to children in distress.	55	42	0	38	43	14
5. Teachers are more likely to communicate regularly with parents about their children's strengths and needs.	50	38	9	43	57	0
6. Teachers have a more positive attitude about working together with parents.	59	31	6	43	38	19
7. Teachers know how to refer a child and family for mental health services.	33	44	19	62	24	9
8. Teachers feel comfortable referring a child and family to mental health services	34	45	16	38	57	0
9. Teachers feel more understood and supported.	47	39	8	38	57	0
10. Teachers feel more competent and confident in their ability to respond to behavior that worries them.	52	36	3	38	43	14
11. This child care center is doing a better job of welcoming parents as partners.	53	41	6	38	57	5
12. Teachers are more likely to receive regular, supportive supervision.	41	36	17	57	29	14
13. The director is more responsive to staff needs.	47	33	16	52	33	14
14. There has been an observable, positive difference in the classroom climate.	41	45	12	52	29	9

sion, and the extent to which their director was responsive to their needs. Directors also rated an improvement in teachers' competencies, but it was not as high as the teachers' self-ratings.

Center-level variables that were statistically significant and moderately correlated were the duration and frequency of mental health consultation activities, teacher turnover, teacher competence (GAS), changes in center quality, and teacher's self-efficacy (TOS). The frequency of mental health consultation activities is associated with lower staff turnover rates ($r = -.43$, $n = 22$, $p < .05$). The level of teacher competence increases with positive changes in child care center quality from Time 1 to Time 2 ($r = .44$, $n = 21$, $p < .05$). There were moderate correlations, although not statistically significant, that showed additional positive effects of the mental health consultation programs. Duration (years) of mental health consultation was moderately correlated with low teacher turnover ($r = -.30$, $n = 20$), positive changes in center quality ($r = .31$, $n = 21$) and increased self-efficacy scores from Time 1 to Time 2 (TOS; $r = .40$, $n = 14$). Center quality change and teachers' change in self-efficacy were positively correlated ($r = .38$, $n = 16$).

The mental health consultation intervention increased teachers' self-efficacy during the 1-year study period. There was a significant positive change in self-efficacy (TOS scores) from Time 1 to Time 2, paired t test, $t(df) = -4.6(35)$, $p < .01$. There were three specific

TOS items that showed statistically significant positive changes from Time 1 to Time 2:

1. There are some children in my classroom that I simply cannot have any influence on ($n = 34$, $p < .05$).
2. As a preschool teacher I can't really do much, because the way a child develops depends mostly on what goes on at home ($n = 35$, $p < .05$).
3. I feel a sense of hopelessness about the future of the children I work with ($n = 36$, $p < .05$).

In a regression model, the change in center quality was predicted independently by duration of mental health consultation (years) and teachers' competencies (mean GAS; $R^2 = .58$, $p < .05$). Centers with more years of mental health consultation services predicted more positive changes in child care quality at Time 2 ($t = 2.2$, $p < .05$) than centers with fewer years of consultation services, controlling for teacher's competencies. Also, centers with teachers who had higher competencies at Time 2 showed significant positive changes in center quality ($t = 2.4$, $p < .05$), controlling for duration of mental health consultation.

The qualitative analyses of the teachers' focus groups showed that the mental health consultation services were positively received by the teachers. There was a shift in teachers' attitudes about themselves and their work from Time 1 to Time 2. The tone of the teacher focus groups at Time 2 was more hopeful and distinctly more receptive to working with mental health consultants than Time 1. The qualitative themes that arose from the focus groups

can be grouped into two categories: (a) teacher changes in their care of children as a result of working with mental health consultants, and (b) center changes as a result of the teachers' work with mental health consultants.

Teachers' comments during the Time 2 focus groups indicated greater empathy and curiosity about the meaning of children's difficult behavior compared to comments during Time 1. At Time 1, children's difficult behaviors were discussed as a source of great stress for teachers, and it was not uncommon for teachers in the focus groups to describe some children's behavior as deliberately malicious. When asked what kinds of help would be supportive, many teachers wanted the children placed elsewhere, in another center or classroom. Some descriptive quotes from the Time 1 teacher focus groups about these feelings are:

How do we feel? Frustrated, stressed, sometimes scared, powerless.

Saying at some point, we can't service your child. We cannot accommodate their needs. They need to be outta here. Period.

On the other hand, at Time 2, there was a curiosity about difficult behavior and an overt recognition that it had meaning, and it taught them something about the life experience of the child with the difficult behavior. Some quotes that reflect these thoughts are:

I see them a little different now, I don't just see them as bad kids. She [the mental health consultant] was able to let me know it was not just a behavior problem, it was something from when he was a little kid . . . I feel sorry for him.

I've learned to try and learn from them. To hear what they have to say. Because kids can tell you something that you didn't even know.

Teachers felt they gained skills in observation, reflection, and planning as a result of their work with mental health consultants. They also frequently spoke about how advantageous it was to have someone to help facilitate teamwork and consistency between teachers.

I have gained the ability to sit back and think about and try to figure out what the child needs with my other team members. It is a kind of skill I wouldn't have had if I hadn't worked with a mental health person. . . . It's not how you can change the child, but how you can help the child.

Teachers' comments at Time 2 also demonstrated a greater feeling of control and responsibility. In the first round of focus groups, many comments were directed toward influences outside of the classroom. There was a feeling of hopelessness about making changes in the

lives of the children in the face of poor parenting, violent neighborhoods, traumatic life events, and so on. While we do not expect that these things were substantially different for the children at Time 2, teachers were more likely to talk about things that they could do differently and seemed more likely to take responsibility for the interactions within the classroom.

She [the mental health consultant] asked us "Are you expecting these children to change?" We realized no, these children are not going to change. And she asked us "How are you going to deal with it?" It was a whole different perspective when we went back into the classroom.

For the most part, teachers felt that their needs were heard, and they were supported by the consultants, which fostered their ability to monitor their interactions with the children.

I have a tendency to use time-outs and say "get over here." That's not how you talk to a child. I say it in a different way now. "I need to see you. What's going on?" I guess I learned not to be so hard because at first I was very hard. I learned how to be softer. I learned how to feel and put myself in the child's place and I could feel the same thing that I think he can feel. . . . it came from the consultants—from their visits and what they're saying and what they're talking about. And I learned how to lower my voice a little bit.

One very strong theme in the teacher focus groups at Time 2 was their appreciation for having the consultant available as a liaison between the center staff and parents and community agencies. Teachers felt stretched to their limit managing the classroom and appreciated help communicating with parents and collateral service providers:

I and the other teachers felt we needed some special help talking to parents. It's one touchy subject. She has been very helpful in getting to the parents when I don't know how to mention things to them.

She was able to set up and make numerous phone calls and all the work that goes into dealing with the school district, and testing and all that. I don't know how to do that.

Lastly, teachers mentioned an improvement in communication and teamwork as a consequence of working with the mental health consultants over the study year. For many teachers, attending regular staff meetings about issues other than administrative ones was a new experience. Many teachers felt that the improved communication and teamwork among the adults in the classroom translated directly into more effective work with the children:

She helps us to express ourselves. There was one instance where she mediated within our team and it really helped to have her. She was able not to be on anyone's side but helped people talk to each other.

You really pull out the good qualities instead of always looking at the negative. You really look at the person, and look within yourself and . . . we can come to some common ground.

DISCUSSION

This evaluation study showed that mental health consultation in urban child care centers was well accepted by staff, improved staff's self-efficacy, increased staff competence, and improved the overall quality of the child care environments. Although there were four different mental health program models, there was a common set of core mental health consultant activities in the 25 child care centers. These activities and goals were similar to other studies that described mental health consultation in child care settings (Johnston, 2000; Knitzer, 2000; Weiss & LaRoche, 1989; Yoshikawa & Knitzer, 1997).

The teachers' focus group discussions highlighted the importance of consistent and frequent contact with the consultants, which made the teachers comfortable utilizing consultants' services. Teachers particularly valued the consultants' role as a bridge between parents and service providers, such as providers in special education and family support agencies.

In this study, mental health consultation programs that were involved in child care centers for over one year showed significant improvements in their overall child care center quality. Mental health professionals have speculated that their consultation services should improve the overall quality of a center (Center for Mental Health Services et al., 2000; Johnston, 2000), but few previous evaluation studies have shown this effect. Center quality is not immediately affected by the initiation of consultation services, but it improves after a period of time—after teachers gain a trusting relationship with the consultant and the teachers increase their competence in dealing with children with emotional and social problems. Another study of an intervention involving a health consultant in child care centers showed positive changes in center compliance with health and safety standards after a 7-month intervention (Alkon & Sokal-Gutierrez, 2002). Together, these studies show that successful consultation services in child care settings may be influenced by length of the service, director support, and staff turnover.

Teachers improved their self-efficacy during the

study, felt more hopeful, and came to believe that they could make a difference in the lives of some children. Qualitative results supported these positive changes in self-efficacy. The focus group discussions suggested a perceived shift in the locus of control from external to internal, which supported the positive changes in self-efficacy. Teachers felt more confident in their ability to intervene and help children with emotional or behavioral difficulties that may be due to family or individual factors.

The center characteristics showed that the participating centers had high staff turnover rates, while at the same time having some long-term employees. The combination of very experienced and inexperienced staff may cause some conflict and create a tense working environment. Under these difficult circumstances, mental health consultants can ease the tension among staff, in addition to helping staff identify children at risk for emotional and behavioral problems. This intervention can impact the individual child, parent, and staffperson in addition to affecting the program by increasing the quality of the center.

Although there were important quantitative and qualitative findings in this study, there were some limitations. There may have been selection bias in the sample of teachers, since only 19% ($n = 36$) of the 188 teachers employed in the child care centers at Time 1 completed questionnaires at Time 1 and Time 2 and participated in the focus groups. The 25 participating centers were not randomly assigned to the research study, and thus, they may not be a representative group of centers. The study did not include child-level outcome measures. Lastly, the Hawthorne effect, participating in an intervention study, could have changed the teachers' relations with other staff, parents, and the children.

RECOMMENDATIONS

Based on our findings, we have four key recommendations. First, mental health consultation services are perceived by child care center staff to be beneficial and should be more accessible and available in child care facilities. Our findings show that mental health consultants can improve teachers' level of competence in dealing with difficult children and involving parents in their care. Also, teachers are receptive to the mental health and consultation services they received, and they learned a great deal from this collaboration. Second, supportive, consistent mental health consultation programs can lower teacher turnover rates. Child care centers with low staff turnover rates provide more stable, trusting environments for children than centers with high staff turnover rates. Third, mental health consultation programs can in-

crease the overall child care quality of a program and improve the staff's ability to work with challenging children, identify children at risk for emotional and social problems, and provide early intervention for at-risk children and families. High quality child care environments can enhance young children's social and emotional development. Fourth, evaluation studies are needed to further understand what components of the mental health consultation programs are most effective and needed. Randomized control trials can study the effect of mental health consultation on intervention programs at different levels, such as the child, teacher, and center levels, compared to control programs.

To conclude, mental health consultants in child care centers provide an invaluable service for child care teachers, directors, children, and families. The consultants help centers improve the overall quality of their child care program, help teachers understand different children's behaviors, and support young children's emotional development in optimal child care environments where young children can develop social relationships, communication skills, and cognitive skills.

REFERENCES

- Alkon, A., & Sokal-Gutierrez, K. (2002). Child care health consultation improves health knowledge and compliance. *Pediatric Nursing*, 28(1), 61–65.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Bulletin*, 84, 191–215.
- Campbell, S., & Ewing, L. (1990). Follow-up of hard-to-manage preschoolers: Adjustment at age 9 and predictors of continuing symptoms. *Journal of Child Psychology and Psychiatry*, 31(6), 871–889.
- Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, & Services, U.S. Dept. of Health and Human Services. (2000). *Early childhood mental health consultation* (monograph). Washington, DC: National Technical Assistance Center for Children's Mental Health, Georgetown University Child Development Center.
- Cost, Quality and Outcomes Study Team. (1995). *Cost, quality, and child outcomes in child care centers, public report* (2nd ed.). Denver: University of Colorado.
- Earls, F. (1980). Prevalence of behavior problems in 3 year old children. *Archives of General Psychiatry*, 137, 153–157.
- Egeland, B., Kalkoske, M., Gottesman, N., & Erikson, M. (1991). Preschool behaviour problems: stability and factors accounting for change. *Journal of Child Psychology and Psychiatry*, 31, 891–909.
- Geller, S., & Lynch, K. (1999). *Teacher opinion survey*. Richmond: Virginia Commonwealth University Intellectual Property Foundation and Wingspan, LLC.
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569–582.
- Greenwood, G., Olejnik, S., & Parkay, F. (1990). Relationships between four teacher efficacy belief patterns and selected teacher characteristics. *Journal of Research and Development in Education*, 23(2), 102–106.
- Harms, T. & Clifford, R. M. (1980). *Early childhood environment rating scale*. New York: Teachers College Press.
- Johnston, K. (2000). Inclusivity in mental health consultation to the childcare community. *Zero to Three*, 20(4), 15–18.
- Knitzer, J. (2000). Early childhood mental health services. In J. a. M. Shonkoff, S.J. (Ed.), *Handbook of early childhood intervention* (2nd ed., pp. 416–438). New York: Cambridge University Press.
- Koot, H., & Verhulst, F. (1992). Prediction of children's referral to mental health and special education services from earlier adjustment. *Journal of Child Psychology and Psychiatry*, 33(4), 717–729.
- Lieberman, A. (2000). Using a mental health perspective to educate and support community partners. *Zero to Three*, 20(5), 27–28.
- Luk, S., Leung, P., Baconshone, J., et al. (1991). Behaviour disorder preschool children in Hong Kong: A two stage epidemiologic study. *British Journal of Psychiatry*, 158, 213–221.
- Mark-Wilson, P., Hopewell, A., & Gallagher, J. (2002). Perceptions of child care professionals in California regarding challenging behaviors exhibited by young children in care: Findings and recommendations of focus group study. Washington DC: Health Systems Research, Inc.
- NIMH Prevention Research Steering Committee, I. C. o. P. o. M. D., NIMH Ad Hoc Committee on Prevention Research. (1996). *A plan for prevention research for the National Institute of Mental Health* (96-4093). Washington, DC: National Institutes of Health, National Institute of Mental Health.
- Pavuluri, M., Luk, S., & McGee, R. (1995). A community study of preschool behaviour disorder in New Zealand. *Australian New Zealand Journal of Psychiatry*, 29(3), 454–462.
- Pavuluri, M., Luk, S., & McGee, R. (1996). Help-seeking for behavior problems by parents of preschool children: A community study. *American Academy of Child and Adolescent Psychiatry*, 35(2), 215–222.
- Proceedings of the Second Annual UCLA National Conference on Preventive Psychiatry. (1988). *Promoting mental health in early child care settings*. Paper presented at the Second Annual UCLA National Conference on Preventive Psychiatry, University of California, Los Angeles.
- Raver, C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
- Stein, M., & Wang, M. (1988). Teacher development and school improvement: The process of teacher change. *Teaching and Teacher Education*, 4(2), 171–187.
- Weiss, J., & LaRoche, C. (1989). The role of child psychiatrists as consultants to day cares. *Canadian Journal of Psychiatry*, 34, 589–593.
- Whitebrook, M., Howes, C., & Phillips, D. (1989). *The National Child Care Staffing Study—Who cares? Child care teachers and the quality of care in America*. Washington, DC: National Center for the Early Childhood Work Force.
- Whitebrook, M., Howes, C., & Phillips, D. (1998). *Worthy work, unlivable wages: The National Child Care Staffing Study, 1988–1997*. Washington, DC: Center for the Child Care Workforce.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*, 115(1), 28–54.
- Yoshikawa, H., & Knitzer, J. (1997). *Lessons from the field: Head Start mental health strategies to meet changing needs* (report). New York: National Center for Children in Poverty, Columbia University Mailman School of Public Health.