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Effectiveness of parent call-in versus e-counseling services in treating pediatric behavior problems uncovered in a primary care medical encounter

Tabitha Becker
George Fox University

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Effectiveness of Parent Call-In Versus E-Counseling Services in Treating Pediatric Behavior
Problems Uncovered in a Primary Care Medical Encounter

by

Tabitha Becker

Presented to the Faculty of the
Graduate Department of Clinical Psychology

George Fox University

in partial fulfillment

of the requirements for the degree of

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in Clinical Psychology

Newberg, Oregon

June, 2011

Effectiveness of Parent Call-In Versus E-Counseling Services in Treating Pediatric Behavior
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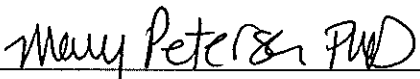
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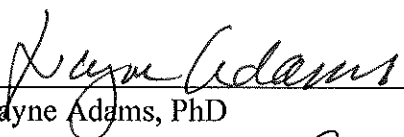
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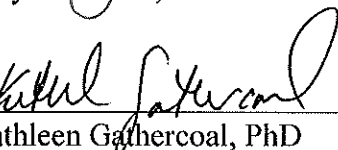


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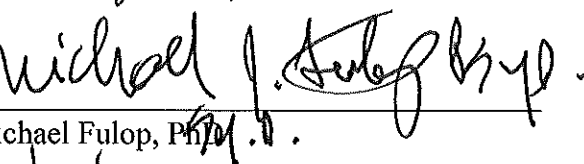
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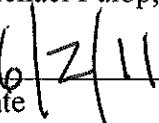
Wayne Adams, PhD



Kathleen Gathercoal, PhD



Michael Fulop, PhD



Date

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Tabitha Becker

Graduate Department of Clinical Psychology at

George Fox University

Newberg, Oregon

Abstract

Effectiveness of phone versus e-mail modalities was tested in delivery of EB treatments for parenting concerns of children ages 0-18. Over 25 weeks, 63 contacts were received with high e-mail dropout (87.5%). Effectiveness of treatment was measured by parental report of therapeutic alliance (Session Rating Scale; Miller, 2000, overall satisfaction, perceived changes in overall functioning of the child (Outcome Rating Scale; Miller, 2000, and selected scales from the Eyberg Childhood Behavior Inventory (Eyberg, 1999). Results indicate no difference between modalities in alliance, satisfaction, overall functioning, or problem frequency at 2-week follow up (T2). However, results showed the combination of therapeutic alliance at initial contact, number of adults in the home and child gender, regardless of modality, were strongest predictors of outcome.

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Chapter 1

Introduction

Nationally, 60% of primary care visits involve treatment of some behavioral health need, targeting concerns such as insomnia, headaches, and symptoms of depression and anxiety. In fact, it is estimated that 28% of the U.S. population at any given time meet diagnostic criteria for a mental disorder, of which half do not receive any treatment. Of the remaining half, 25% receive specialized mental health treatment, and 25% receive treatment only through their medical care provider (Dobmeyer, Rowan, Etherage, & Wilson, 2003). More relevant to this study, “it is well documented that a large portion of pediatric primary care practice revolves around behavioral health concerns” (Ardorfer, Allen, & Aljazireh, 1999; Cooper, Valleley, Polaha, Begeny, & Evans, 2006, as cited in Polaha, Valleley, & Volkmer, 2007 p. 2). Two approaches have been explored in addressing this need; one is a co-located model in which a behavioral health professional is integrated into the pediatric primary care environment (Bray & McDaniel, 1998, Drotar, 1995, Schroeder, 1979, as cited in Polaha, et al., 2007 p. 2). The second model is a specialized behavioral training program for pediatricians (e.g., American Academy of Pediatrics, 2002; Sanders, Tully, Turner, Mahar, & McAuliffe, 2003, as cited in Polaha et al., 2007 p. 2).

Rural Areas: A Unique Challenge

Limited resources and geographical distance creates additional barriers for many families living in rural areas. As a result of impoverished pediatric behavioral health care, children may be set up for lifelong struggles with behavioral and emotional issues. While some families have resources to reach out for adequate treatment of childhood behavioral health problems, a substantial percentage of families who live in rural areas do not have the means for addressing the most basic behavioral health needs. According to The Center for Rural Affairs, “Data show that 90 percent of farm and ranch families do not have insurance,” (National Public Radio, 2009).

Several studies have been conducted to evaluate the impact of extending behavioral mental health services to rural and urban populations (Bray & McDaniel, 1998; Drotar, 1995; Polaha et al., 2007; Schroeder, 1979). As mentioned earlier, two approaches have been taken: (a) providing specialized behavioral training to primary care pediatricians, and (b) integrating psychologists into the primary care setting. Each approach has shown promise for increasing effectiveness of delivering behavioral health treatment in the primary care setting. “However, there are inherent complications in both models,” according to Polaha et al. (2007). According to Cooper, Valleley, Polaha, Begeney, & Evans (2006), “the demand on physicians’ time continues to present an obvious stumbling block to the approach.” Polaha et al., go on to say that “given current estimates regarding the frequency of psychosocial concerns raised in primary care, it has been suggested that the practice of the traditional 50-minute behavioral health visit cannot adequately keep pace (Strosahl, 2002). The co-located or integrated model also does not address the issue of socio-economic barriers for the underserved, low-income rural family that may not

have the resources to physically get to the clinic. The above strategies have attempted to address the need for behavioral health services in rural areas; however, multiple barriers continue to limit the effective delivery of services to families in those areas.

Yamhill County, Oregon is one illustration of the intersection of the limited resources and high need that is emblematic of many rural areas. According to the U.S. Census Bureau's data (2005), the total population of Yamhill County is estimated to be 93,901, with 11,909 living in poverty. Of the 11,909 living in need, it is estimated with a 90% confidence level that 3,905 are children 18 years and younger, making up 17% (or 14.1% to 20.6%) of the total population. In addition to this population, it is estimated that 20% of the total population has no health insurance. So, when parents have children with behavioral health needs, treatment options are limited due to a lack of health insurance, a lack of specialty behavioral health care providers, and geographic distance.

Parenting Children with Behavioral Health Needs

Parenting children with behavioral health needs can be an exhausting and overwhelming task for skilled parents. Yet, when a child's behavioral problems are exacerbated by poverty and limited access to resources, both parent and children face increasing stress. Importantly, abuse and neglect are potential outcomes of unaddressed behavioral health concerns in children. According to the U.S. Department of Health and Human Services (2009), children under age three are the most vulnerable to death by abuse or neglect. Parents and caregivers are most often the perpetrators of such abuse and neglect. According to the U.S. Advisory Board for Child Abuse and Neglect (2009), in 2007, one or both parents were responsible for 69.9% of child abuse or neglect fatalities.

Research has shown that parenting support programs can effectively intervene with children and families very early on, even prenatally or at birth, offer parents help with mental health issues. Children who see a parent or other family members abused or abusing another family member are more likely to view violence as an accepted way to solve problems. Children who are exposed to domestic violence are more likely to abuse others as they grow older (American Psychological Association, 1996). Parent education and training programs are well-documented for effectiveness in reducing problem behaviors in children (Kazdin, 1987). Parent education and training programs have demonstrated effectiveness for reducing conduct disorder problems in children (Strengthening Families, 1999; Webster-Stratton & Taylor, 1998).

Pediatricians: A Primary Resource for Parents

Pediatricians have become the first-line of intervention for parents of child with behavioral health needs (Polaha et al., 2007). Parents seek advice from their child's pediatrician for a variety of reasons including, mandated appointments for immunizations, physical access, familiarity and trust, all of which provide an opportunity for consultation. Burklow, Vaughn, Valerius, & Schultz, (2001) identified nine top parental concerns discussed during the pediatric visit; of the top nine,

discipline was the most frequently experienced (41%), commonly discussed (31%), and frequently expected (75.4%) topic to be discussed. The frequency of discussions on psychosocial topics was less than half that of the actual reported occurrence of the psychosocial concern. When discussions on psychosocial topics did occur, however, most parents (87.3%) perceived pediatricians as helpful. (p. 555)

According to Wersh, Tritt, Stambrook, & Terrance (1982), “pediatricians are in a strong position to practice preventive psychological medicine because of their access to large numbers of patients where problems of child development and the more serious emotional and interpersonal problems are encountered in their early stages” (p. 221). Another study supports this notion by saying, “The potential contributions of psychologists at this early interventive level have been noted” (Morrison, 1976, p. 306). While this integrated model is ideal, most clinics do not have the resources or inclination to employ an integrated model.

While it is known that a large percentage of pediatric primary care has addressed behavioral health concerns (Arndorfer, Allen, & Aljazireh, 1999; Cooper et al., 2006) the integrated model has been proven to be effective (Bray & McDaniel, 1998), and specialized pediatrician training has proven its effectiveness (American Academy of Pediatrics, 2002). Although the effectiveness of these models has been established, the burden of providing the care still falls squarely on the shoulders of pediatricians, requiring more resources (space, consultation, training, and contracting psychologists for an integrated environment). And given the limited resources available in most rural areas, the incorporation of an integrated model to address pediatric behavioral health concerns are likely to be more than any system can support.

Alternative Strategies to Meet Needs

Due to pressing health care needs of our increasingly uninsured population coupled with an over-burdened health care system, a sustainable model in which pediatric behavioral health concerns could be addressed might be beneficial to both pediatric medical professionals as well as to underserved children and their families. While in many situations a pediatric primary care visit or a full behavioral health evaluation is desirable (such as during an acute crisis, or a

complicated, long-standing problem), many common developmental behavioral issues can be addressed with a quick, well-informed behavioral educational intervention. Through an easily accessible phone line or website, parents and families could be able to access behavioral information quickly and remotely, with the hope that this intervention resolves the problem before it reaches an acute or chronic stage. Pairing this model with a pediatric clinical psychology training institution, such as George Fox University, Graduate Department of Clinical Psychology, could address problems at less cost, and pediatric physicians and other medical professionals could be relieved of these burdens for which they are not paid, or highly trained. It is hoped that through a pairing of a site engaged in training supervised, doctoral level students with a call-in, or e-counseling service, that a sustainable and effective service can be created to urban and rural communities, Schroeder (1979), Schroeder and Kanoy (1985), and Polaha et al. (2007) established that a telephone parenting support line such as the “Pediatric – Call-In Hour,” and an integrated model can be effective in treating common child development and management problems and serve as an effective adjunct to traditional pediatric care.

According to Schroeder and Kanoy (1985), parental satisfaction can be high, and can be categorized into effectiveness by problem type, saying, “Overall the service and suggestions were highly rated. Suggestions for socialization problems (i.e., negative behavior, sibling/peer difficulties, personality/emotional problems) were rated as more effective than those for developmental problems (e.g. toileting, sleep, developmental delays)” (p. 15). Polaha et al. (2007) found that 75% of all calls concerned daytime wetting, conduct problems, anxiety, sleep, and repetitive behavior. While Shroeder and Kanoy (1985) found that calls lasted 6 minutes on

average, Polaha et al., (2007) found that calls lasted “an average of 21 minutes, and parents reported high satisfaction and positive outcomes at follow-up” (p. 9).

While there is some research on the effectiveness of e-counseling (internet cognitive behavioral/behavioral interventions), the research is limited. However, there is some recent research that specifically addresses the effectiveness of one technique with one behavioral concern, for example, Carlbring and Smit (2008) tested the effectiveness of internet delivered self-help with telephone support for pathological gamblers. Citing that,

effective therapies for pathological gambling exist, their uptake is limited to 10% of the target population. To lower the barriers for help seeking, the authors tested an online alternative in a randomized trial ... the internet-based intervention resulted in favorable changes in pathological gambling, anxiety, depression, and quality of life. (p. 1090)

With a Cohen’s *d* effect size of 0.83, this study supported the effectiveness of internet-based treatment with telephone support for pathological gamblers.

More specifically, in the pediatric world, Spence, Holmes, March, & Lipp (2006) conducted a study entitled, “The Feasibility and Outcome of Clinic Plus Internet Delivery of Cognitive – Behavior Therapy for Childhood Anxiety.” While this study focused on a multi-session cognitive-behavior therapy (CBT) internet treatment of one behavioral problem, it might provide a window into the effectiveness of delivering a pediatric treatment via a remote modality (i.e., the internet). According to Spence et al., “the internet treatment content was highly acceptable to families, with minimal dropout and a high level of therapy compliance” (p. 614). Citing that other methods have been tried in increasing access to behavioral therapy in other areas of health, Spence et al. cites Newman (2004), in saying that, “palm top computers, email, the web, DVD’s,

CD-ROMs, and interactive voice messaging systems have been used as alternatives or adjuncts to clinic-based therapy” (p. 614). Anderson, Jacobs, and Rothbaum (2004) state that CBT, in particular, has been suggested to be well-suited to computer based administration because of its structured and systematic format.

Another study conducted by Ritterband et al., (2003), addressed internet intervention as adjunctive therapy for pediatric encopresis. Their findings were as follows, “the web participants demonstrated greater improvements in terms of reduced fecal soiling, increased defecation in the toilet, and increased unprompted trips to the toilet.” All participants in this study continued to receive routine care from their primary care physician during the study. According to Ritterband et al., encopresis accounts for 3% of general pediatric clinic visits (Loening-Baucke, 1993, as cited in Ritterband, et al., 2003, p. 910).

Proposed Study

While past research focused on co-location or integration of a psychologist into the pediatric primary care environment, this research explores the development of services, as previously described, to reach rural and at-risk urban populations by offering different modalities of remote treatment via a telephone call-in or an internet e-counseling program. Our hope was that a remote service targeting the most common pediatric behavioral needs would provide informed, low-cost behavioral health solutions to the parents of children with common behavioral health challenges while relieving pediatric medical professionals of having to focus on time-consuming treatment. Our study delivered behavioral interventions for sub-clinical childhood social/emotional and developmental problems via telephone or e-mail conversation. A licensed psychologist supervised clinical psychology doctoral students in delivery of the

pediatric behavioral health treatment. Partnering pediatricians had the option to refer families to the service in order to address “typical” parenting concerns, such as negative behaviors and developmental behavioral issues.

This research sought to answer the question: which is more effective in treating common childhood behavioral issues – brief phone interventions or email conversations with therapists over the internet? We hypothesized that there wouldn’t be a difference in satisfaction or problem outcome between telephone versus e-mail treatment for common behavior problems. Secondly, we sought to determine if a measure of therapeutic alliance at initial contact predicts improvement of outcome at the two-week follow-up (T2). Furthermore we attempted to relate parent satisfaction and subjective evaluation of treatment efficacy in order to justify the use of either of the cost-effective approaches, or the use of both as adjunctive treatment.

Chapter 2

Methods

Research Model

Methodology of this study is adapted from that used in prior research conducted using similar pediatric Call-In Hour intervention programs (Schroeder, 1979). Prior successful programs used methods in which the Call-In Hour was operated from the primary care setting, with a licensed psychologist and two doctoral level students providing Call-In and Come-In Hour services one hour per day, two days per week. In one study (Polaha et al., 2007), the referrals came from and were offered in two rural pediatric primary care clinics. The service was described to the staff at the clinics via two lunch visits, and included the benefits, structure of the Call-In/Come-In service and how to refer appropriately. “It was emphasized that the service was developed to address uncomplicated parental concerns about child behavior, development, and emotional well-being, and it should not be considered a ‘crisis’ or ‘hotline’” (p. 5).

Sample

The demographics of the counties in which these clinics reside come from U.S. Census Bureau’s data (2005). The total population of Yamhill County is estimated to be 93,901, with 11,909 living in poverty. Of the 11,909 living in need, it is estimated at the 90% confidence level that 3,905 are children who are 18 years and younger, which makes up 17% (or 14.1 to 20.6%) of the total population. In addition to this target population, it is estimated that 20% of the total population has no health insurance. In Multnomah County, there are 272,098 households out of

which 26.5% have children under the age of 18 living with them, 40.9% are married couples living together, 10.8% have a female householder with no husband present, and 44.1% are non-families. The average household size is 2.37 and the average family size is 3.03. The per capita income for the county is \$22,606. 12.70% of the population and 8.20% of families are below the poverty line. Out of the total population, 15.40% of those under the age of 18 are living below the poverty line.

Procedures

Starting October 11, 2010, 2,000 colorful brochures were placed in exam and waiting rooms of three medical clinics, targeting families with children from infancy to 18 years old. Informed consent was advertised in the brochure by explanation that this program was part of a research study and that by contacting the Parent Advice Line they were agreeing to participate in the study. Physicians from one urban clinic provided “warm hand-offs” of the brochure while referring the parent to the George Fox University Parent Advice Line (PAL). The participating pediatric practitioners were asked to refer their well-child check and advice-line patients (families) to the PAL at which point the parent was given a brochure with a phone number or email address to contact. Subsequent advertising consisted of brochure distribution of an additional 3,000 brochures to one school district (North Marion School District), local area pre-schools and pre-school/Kindergarten Montessori schools and day cares. A press release was distributed in January of 2011, targeting local area news broadcasters and print magazines, which resulted in one live interview on a daytime program (Studio 6 on 6, Portland, Oregon), and a taped interview on FOX 12 News. In addition, Portland Metro Parent created and placed an advertisement pro-bono, announcing the program/study. A Craig’s List listing was posted under

“parenting resources,” and a face book page was established. A web page on the George Fox University website was embedded with a link to the PAL program on the home page, along with an interest article on the home page. One subsequent ad was developed and placed in Portland Metro Parent Magazine, and an article was published in an e-newsletter distributed by the magazine. These efforts, in conjunction with word-of mouth solicitation (no payment), yielded sixty-three contacts during the study period (October, 2010 – April 18, 2011). Fifty two percent of the contacts were handled over the phone, and 48% were handled via email. This was not considered to be a randomized trial, as self-selection became a necessity as initial callers refused to use the email version, or dropped out if they were assigned to email, regardless of whether or not they had a computer (100% of callers had access to a computer). Initially, parents were given one phone number to contact the PAL, once the accessibility was determined the caller was randomly assigned a modality. This method was abandoned at the second contact for a more successful self-selection method allowing parents to select their preferred modality facilitating a higher completion rate.

Following George Fox University Institutional Review Board approval, the Parent Advice Line was offered two evenings per week (initially one hour per evening) expanding to two after 12 weeks of operation, and was staffed by an on-call licensed psychologist and two on-call doctoral level students. All participants met the following inclusion criteria; provide direct care of the child, fluent in English or Spanish and confirmation by the supervising psychologist that the concern was appropriate to this level of intervention. Inclusion criteria also included determination of goodness of fit – the child was a healthy, developmentally normal child who was experiencing common developmental problems, such as bed wetting, tantrums, night terrors,

and so on. If the child had symptoms of abnormal development, the family was referred to experts in their area.

Each initial contact began by welcoming the caregiver and reassuring their confidentiality. After discussing the foremost concern, staff provided validation that the concern could be appropriately addressed by the Parent Advice Line (if not, a referral was made), the student responder then collected demographic data, and operationalized the problem. Duration, frequency and intensity data were collected at this time using the The Eyberg Child Behavior Inventory (Eyberg, 1999). After initial data was collected, doctoral students (a) responded to the concern by providing a brief therapeutic rationale, and (b) recommended using a problem-specific, empirically supported treatment protocol as needed (Borba, 2007; Schroeder & Gordon, 2002; Henard-Zolten & Long, 1992); the student then (c) administered the Outcome Rating Scale (ORS; Miller, 2000) and the Session Rating Scale (SRS; Miller, 2000). In addition to treatment recommendations, caregivers were, when appropriate, referred to the George Fox University Behavioral Health Clinic or other community resources for more intensive multi-session, treatment.

Following the contact, recommendations were emailed or mailed to each parent, or the parent was referred to www.healthykids.org (Nemours Foundation, with permission). This follow up assisted parents in accessing both the treatment and additional resources recommended by the clinician. With parent permission, the family's pediatrician also received notification of client follow-up to their referral, with a brief note on the nature of the problem and the recommendations given to the parent(s).

During the initial call/email (Time 1 or T1), the parent was asked a standard set of questions regarding family demographics, the child's mental health history, short satisfaction survey and their interest in participating in a follow-up survey regarding the service. Student responders contacted the parents who consented, at two weeks (T2) by telephone or email to complete the outcomes measure (the SRS was not appropriate at T2 since no new interventions were delivered during this contact). If the family had further questions regarding other problems not related to the initial call, they were responded to via a separate protocol, and the problem was addressed and assessments were evaluated on ratings of duration, frequency, duration, outcome and therapeutic alliance. The doctoral level student documented the number of calls, and again determined the appropriateness of addressing their concern through the PAL (or if they should be referred).

Measures

The Eyberg Child Behavior Inventory. The actual Eyberg Child Behavior Rating Scale (ECBI), as reported by Robinson, Eyberg & Ross (1999), was not used in this research study; although the Duration, Frequency, and Intensity scales were adapted to the study through oral and written presentation after problem identification, therefore the reliability and validity of the adapted scales should be interpreted with caution.

ECBI reliability. The mean split-half correlation for the Intensity Score was $r = .95$ and the mean split-half correlation for Problem score was $r = .94$. Test-retest correlations were $r(15) = .86, p < .001$, for the Intensity Score and $r(15) < .88, p < .001$, for the Problem Score. The mean item to total correlations were $r = .56$ for the Intensity Score and $r = .55$ for the Problem Score. These correlations yielded internal consistency coefficients or $r = .98$ for both scales.

Thus, the reliability coefficients indicated that both scales of the ECBI were homogeneous and reasonably stable.

ECBI validity. Support for the internal validity, as well as the reliability, of the ECBI was provided by the highly significant coefficient of the internal consistency described above (Cf. Runkel & McGrath, 1972). Further evidence of internal validity was reflected in the inter-item correlations. Of the 612 possible correlations, 602 were significant ($p < .05$) and the mean inter-item correlation was $r = .31$ for the intensity ratings. The mean inter-item correlations for the problem ratings were all significant ($p < .001$), and had a mean of $r = .29$. A principle components factors analysis of the intensity ratings indicated that 63% of the variance was explained by the first factor, on which every item loaded positively. The convergence of the data provided by the internal consistency coefficients, the inter-item correlations, and the factor analysis demonstrated the homogeneity of each of the ECBI scales and suggested that the test is a one-dimensional measure of the construct “conduct problem.” Note: For this reason, the entire scale was not used in its entirety, as the research addressed many different normal developmental behavioral concerns.

The two scales within the ECBI, the Intensity Score and the Problem Score, correlated with each other $r(510) = .75$, ($p < .001$). Thus, the scales are measuring highly related, but not identical dimensions.

Oral Outcome Rating Scale. The Oral Outcome Rating Scale (ORS; Miller & Duncan, 2000), is a four-item (as adapted) parent report instrument that was developed as a brief alternative to the Outcome Questionnaire 45 (OQ-45), a popular outcome questionnaire

developed by Lambert, Hansen, et al., (1996). The questions were adapted for subjective parental ratings of child functioning, relationships, and social role performance.

Validity. Pearson product moment correlation between the ORS and the OQ-45 yielded a concurrent validity coefficient of .58, a figure considered adequate given the brevity of the ORS.

Reliability. Reliability as assessed by Cronbach's coefficient alpha, was .93, test-retest reliability at the second session, .66. An independent study of the reliability of the ORS conducted by the Center for Clinical Informatics reported a coefficient alpha of .79 ($n = 15,778$) and test-retest reliability at second administration of .53 ($n = 1,710$; Miller, Duncan, Brown, Sorrell, & Chalk, 2004). With regard to test-retest reliability, it is important to note that lower figures are expected for measures designed to be sensitive to change from week to week as research has shown both the ORS and OQ-45 to be (Miller et al., 2004; Vermeersch, Lambert, Burlingame, 2000).

Session Rating Scale 3.0. The Session Rating Scale 3.0 (SRS; Miller, Duncan, & Johnson, 2000) is a 4-item, client (adapted for parent) completed measure derived from a 10-item scale originally developed by Johnson (1995). Like the ORS, the SRS includes a four-item questionnaire assessing subjective parental ratings of four areas of the therapeutic alliance. Items on the scale reflect the classical definition of the alliance first stated by Bordin (1979), and a related construct termed the client's theory of change (Duncan & Miller, 2000). As such, the scale assesses four interacting elements, including the quality of the relational bond, as well as the degree of agreement between the client and therapist on the goals, methods, and overall approach of therapy.

Reliability. To test the reliability and validity of the SRS, Duncan, Miller, Reynolds et al. (2004) compared the instrument to the Revised Helping Alliance Questionnaire (HAQ-II)—a widely used measure of therapeutic alliance. The reliability of the SRS as estimated by coefficient alpha compared favorably with the HAQ-II (.88 vs. .90). Test-retest reliability for the SRS over six administrations was .74, compared to .69 for the HAQ-II. As with the ORS, independent confirmation of reliability of the SRS was conducted by the Center for Clinical Informatics. In a sample of nearly 15,000 administrations, coefficient alpha was found to be .96, while test-retest reliability was .50 (Miller et al., 2004)

Concurrent validity. In the study, Pearson product moment correlations between the SRS and HAQ-II averaged .48, evidence that two scales reference similar domains. As with other established alliance measures, evidence of construct validity was found in the correlation between early SRS scores (2nd session) and outcome of treatment ($r^2=.29$).

Overall PAL program satisfaction. Overall PAL program satisfaction was measured at T1 and T2 using a Likert scale (1-10), with 1 being *not at all satisfied*, and 10 being *completely satisfied*. No reliability or validity data are available for this scale; however, this item demonstrated a strong correlation ($r = .956$) in this study with SRS – Overall (SRS-O) ratings, indicating that satisfaction with the program in general had a positive relationship with ratings of therapeutic alliance.

Data Analysis

Before treatment was delivered at T1, the caregiver was given selected scales from the Eyberg Childhood Behavior Inventory (duration, frequency and intensity scales), and after the treatment was delivered the ORS (Miller, 2000; see Appendix A) in order to establish a baseline.

At the end of the initial contact both treatment groups were administered the SRS (Miller, 2000; see Appendix A), both of which have been empirically validated in oral (scripted) and web-based as well as written form via their respective modality of treatment. At this time subjective parental ratings of PAL program satisfaction were taken. At T2, only the ORS and PAL program satisfaction ratings were administered. The timeframes were selected because immediate feedback would allow opportunity for clarification or further information if necessary, as well as providing in vivo evaluation of the modality and the program.

A sample size of at 63 participants was obtained. Initially a sample size of 26 participants was necessary for each modality as was determined to be necessary for an effect size of at least .70 (moderate to large effect size using the SRS & ORS). Descriptive statistics (means, standard deviations, and frequencies), independent samples t-tests, correlations and a 3-Step Linear Multiple Regression were used to analyze the data being collected, with the independent variables being: (a) mode of delivery – two levels, phone or e-mail, and (b) Time –T1 in session, T2 – 2 weeks post-session. The dependent variables were: (a) Ratings of frequency and intensity (Eyberg, selected scales), impact of behavior (outcome overall – ORS-O), therapeutic alliance (SRS-Overall or SRS-O), and overall PAL program satisfaction at T1, and (b) Parent ratings of outcome and frequency at T1, T2 (ORS-O, ECBI-F), and overall PAL program satisfaction at T2. Independent samples t-tests were used to compare differences between groups including: (a) differences in frequency of problem, therapeutic alliance, outcome, and satisfaction at each time, T1, T2, regardless of modality – determining whether or not the PAL service as a whole showed a significant main effect for time as measured by the ORS; (b) differences between treatment modality groups – to determine if there was a significant main effect for modality, in other

words, to determine whether one modality was more effective than the other, and (c) the interaction between time and modality – whether change across time depended on group membership/treatment modality. A bi-variate regression was also used to see if the SRS administered at T1 predicted success (as determined by outcome) at T2. A multiple regression was conducted to see if data collected on the ORS, SRS, EBC-F and PAL Satisfaction Overall at T1 predicted success at T2 as measured by the T2.ORS-O. Descriptive statistics provided means and standard deviations and frequencies of the demographic variables (gender, SES, parent education, etc.). Additional descriptive data were gathered including most common concerns, frequency and average length of contact.

Chapter 3

Results

Overall, the PAL program received 33 phone calls and 30 emails between October 11, 2010 and April 18, 2011 ($n = 63$). We had a total of 6 contacts between October 11 and December 31, 2010, and the remaining 57 contacts were made between January 1 and April 18, 2011, with an average of 2.52 contacts per week overall, or 1 to 2 contacts per evening. The average number of contacts per week made between January and April was 3.2. Average time per phone call was 39.21 minutes (range = 20 minutes to 75 minutes), time on email was not tracked due to e-mail drop-outs with varying stop points - data would be meaningless in comparison to completed phone times.

Initially, parents selected the modality based on their preference, either by calling in or e-mailing the PAL. In an effort to equalize study sample size, the research team solicited non-paid participants for the email condition by word of mouth in order to augment the eleven emails that came through parent self-selection. Once a caller contacted the PAL by phone, the responder (a doctoral level psychology student) provided information about the purpose of the study and received informed consent. According to the protocol, the responder read a script (see Appendix A), which guided the caller through a list of demographic questions, as well as the duration, frequency, and intensity of the problem (selected items from Eyberg Child Behavior Inventory or ECBI- see Appendix A). After these questions were answered, the responder operationalized the

problem via a list of questions (i.e., “what happens before, during and after the event?”), and the intervention was provided. The caller was then asked to answer two more sets of questions assessing levels of child distress (ORS; see Appendix A) and the therapeutic alliance or the level of empathy they felt from the responder (SRS; see Appendix A), as well as provide an overall “PAL Satisfaction” rating. All in all, the Mean time on a phone call lasted 39.21 minutes. Email contacts received the same protocol in terms of process (see Appendix B for email script); the number of email contacts per participant ranged from 5 to 51 – with dropouts happening at various points in the email exchange.

Fourteen referrals came from the pediatric community, 10 referrals were from a pediatric clinic in NE Portland (urban, middle income), 2 referrals from a Primary Care Clinic in Sherwood, and 1 each from pediatricians in Newberg and Lake Oswego. We received 19 referrals via word-of-mouth (friends, family, etc.), 1 via Craig’s list, 4 via Portland Metro Parent Magazine Ad placement, 6 via News Broadcasts, and 19 referrals were unknown due to e-mail dropouts before referral source was obtained. In percentages, 33% of all contacts came from pediatricians, 44% came from word of mouth, and 23% came from print advertising and news broadcasts. Of the 44 completed T1 contacts, 24 (54%) completed the follow-up at T2, for a total of 24 completed T1/T2 contacts (phone completed 20 contacts vs. email with 4 completed contacts).

Of the contacts (38%) was from parents seeking advice about boys, and 32% of the contacts was about girls, with 30% unknown due to dropouts (see Table 3) with the mean age of the child being 6.5 ($SD = 4.2$; see Descriptive Statistics, Table 1). The average number of years of education of the caller was 14.67 years, with a mean annual income of \$94,302.33, for a range

of \$0.00 to \$500,000, with the most frequent being approximately \$100,000 (Frequency = 16 out of 42 known incomes). The average number of adults in the home was 2.12, with 61.9% of homes having two adults or more living with the child, and 50.8% had 1 sibling or more. Females were more likely to contact the PAL, with 100% of completed T1/T2 contacts being mothers who initiated the contact. The five most frequent problems called about were defiance (44%), anxiety (9.3%), bedtime/sleep (9.3%), and depression (9.3%) of all contacts. Sibling rivalry came in as the 5th most called about problem (7 % of all contacts); see Table 4.

Table 1

Descriptive Statistics

	Mean	Standard Deviation	N
Child's Age	6.5	4.2	44
Siblings	1.3	.92	44
Caller's Education	14.7	1.86	43
Adult's Home	2.1	.63	43
Income	94302.33	82656.07	43

According to Eyberg Child Behavior Inventory scales of intensity (ECBI-I), 90% of parents reported the problem as being a problem for them, with 10% reporting that the child's behavior was not a problem for the parent. The mean duration of the problem differed insignificantly between modalities, with email users experiencing longer periods of distress before contacting the PAL at T1, and phone users reporting shorter periods of distress prior to

contacting the PAL, as measured in months, $t(8.16) = 1.6, p = .14$ (for means and standard deviations see Table 2).

Table 2

Means of Dependent Measures by Modality at Time 1 and Time 2

	Email	T1 Phone	All	Email	T2 Phone	All
ORS-O	7.0(1.16)	7.6(1.31)	7.5(1.29)	8.0(.816)	7.6(2.09)	7.7(1.93)
SRS	7.1(3.94)	9.3(1.27)	8.9(2.13)	n/a	n/a	n/a
PAL Satisfaction	7.7(3.60)	9.5(.900)	9.1(1.96)	8.8(2.5)	9.3(.851)	9.2(1.20)
Eyberg Frequency	6.1(.93)	5.6(1.46)	5.7(1.37)	3.3(1.29)	4.3(2.07)	4.1(1.98)
Eyberg Duration	52.6(76.4)	11.1(14.0)	20.4(40.7)	n/a	n/a	n/a

Note. ORS-O = Outcome Rating Scale, Overall; SRS-O = Session Rating Scale, Overall; T1 = Initial Contact; T2 = 2-week follow-up.

Table 3

Frequency of Child Gender

Gender	Frequency
Boys	24
Girls	20
Unknown	19
Total	63

Table 4

Frequency of Problems

Problems	Frequency	Percent
Negative Habits/Defiance	19	30.2
Anxiety	4	6.3
Bedtime / sleep	4	6.3
Tantrums	4	6.3
Sibling Rivalry	3	4.8
Divorce	2	3.2
Depression	1	1.6
Developmental Delay	1	1.6
Homework	1	1.6
Teens	1	1.6
Enuresis	1	1.6
Toilet Training	1	1.6
Total	43	68.3
Missing	20	31.7
Total	63	100.0

The original hypothesis stated that the modality (phone vs. email) used by the parent to contact the PAL, would not differentially impact outcome (levels of distress) as measured by the Outcome Rating Scale, Overall (ORS-O). The ORS-O was administered to the parent at the initial contact (T1) and was repeated two weeks after the initial contact (T2) to determine if

improvement in outcome was obtained. Only 4 of the 30 participants in the email condition were willing to participate in T2 data collection.

An independent samples *t*-test explored whether there was a difference between phone and email groups in their reported level of distress (ORS-O) at T1. The results of the *t*-test confirmed that there was no difference between groups in ORS-O scores at Time 1 ($t(36) = -1.14, p = .26$), thus the ORS-O scores at T1 for the two modalities were combined for subsequent data analysis. Additionally, the mean scores for the reported level of distress (ORS-O) between phone and email groups did not differ at T2, $t(12.6) = .65, p = .53$, and so the two modality groups were also combined for subsequent data analysis at T2. With both groups combined at T1 and T2, a paired sample *t*-test (*t*-test for all respondents at T1 and T2) explored the main effect of time on ratings of distress (ORS-O) at T1 and T2. There wasn't a significant difference between parent outcome rating from T1 to T2 in overall distress, $t(23) = -.51, p = .62$. A small effect size (Cohen's $d = .37$) confirmed that a larger sample size would likely reflect similar findings (Mean scores for ORS-O for both modality groups at T1 and T2 are shown in Table 2).

Furthermore, an independent samples *t*-test explored whether there was a difference between phone and email groups in their reported frequency of problem occurrence using the frequency scale from the Eyberg Child Behavior Inventory (ECBI-F) at T1. The results of the *t*-test confirmed that there was no difference between phone and e-mail groups in ECBI-F scores at Time 1 ($t(38) = 1.09, p = .28$; see Table 2). The data did not meet the assumption for equal variances, Levene's $F = 2.26, p = .140$, therefore, a Welch's *t*-test was used. Thus, the ECBI-F scores at T1 for the two modality groups were combined for subsequent data analysis.

Additionally, the mean scores for the reported level of frequency of the problem (as measured by ECBI-F) between phone and email groups did not differ at T2, $t(22) = -.92, p = .37$, again the assumption of equal variances was not met, Levene's $F = 3.93, p = .06$, and a Welch's t -test was again used. The two modality groups were again combined for subsequent data analysis at T2. With both levels combined at T1 and T2, a paired sample t -test (t -test for all respondents at T1 and T2) explored the main effect of time on parental reports of frequency of problems at T1 and T2. There was a significant difference between parent frequency rating from T1 to T2; ($t(23) = 4.3, p < .01$). The effect size for the ECBI-F at T2 (combined modalities) is large, Cohen's $d = .94$ (Mean scores for ECBI-F for both groups at T1 and T2 are shown in Table 2.). These findings indicate that unlike modality, time had a significant effect in reducing problem behavior at the two-week follow-up in terms of frequency of occurrence, yet it is important to note that there was only a small correlation between T2 EBCI-F ratings and T2 ORS-O ratings, $n = 24, r = -.244, p = .251$, (means can be found in Table 2) and T1 and T2 ECBI-F ratings were not included in Multiple Regression analyses due to lack of significance in predicting overall distress (ORS-O) at T2.

Additional outcome variables were also explored. The Session Rating Scale (SRS-O), a measure of therapeutic alliance, did not show a statistically significant difference between the phone and email groups at Time 1, $t(6.29) = -1.43, p = .20$ (for means and standard deviations see Table 2). The data did not meet the assumption for equal variances, Levene's $F = 24.99, p = .200$, therefore, a Welch's t -test was used. However, the effect size for the SRS-O difference is moderate, Cohen's $d = .73$, indicating that a larger sample size would likely reveal a significant difference in ratings of therapeutic alliance as measured by parent ratings on the SRS-O, with

phone having significantly higher ratings than email. No further studies on the effect of time on reports of therapeutic alliance were conducted, as the SRS-O was only administered at T1 (T2 was not considered to be a session).

When comparing modalities in relation to overall satisfaction, the T1 PAL Satisfaction measure (see Appendix A), like the SRS-O did not meet the assumption of equal variances and the Welch's t-test indicated no difference in the mean satisfaction scores between email and phone, $t(6.23) = -1.29, p = .24$ (see Table 2 for means and standard deviations). However, PAL Satisfaction, like SRS-O, had a moderate effect size, Cohen's $d = .67$ indicating, again, that a larger sample may reveal significant differences between modality groups in overall satisfaction.

There was a strong correlation found between T1 reports of therapeutic alliance (SRS-O) and the parents' global satisfaction question on the protocol, "On a scale of 1-10, how satisfied were you with the GFU PAL program in general, with 1 being not at all, and 10 being very satisfied." The correlation between PAL Satisfaction and SRS-O was $r = .96, p < .01$. (for means and standard deviations see Table 2). This result indicates there is a strong relationship between the parents' perception of therapeutic alliance or empathy and ratings of global satisfaction with the PAL program.

The high dropout rate of the participants in the email condition (87.5%, only 4 out of 32 responded two weeks (T2) after the initial contact) prevented meaningful between-group comparisons of overall satisfaction (PAL Satisfaction) at T2. As noted above, there were not any statistically significant differences between the phone and email conditions on outcome, therapeutic alliance, satisfaction or Eyberg symptoms rating scales reported at T2.

Based on the literature indicating a strong correlation between outcome and therapeutic alliance, it was predicted that parent report of outcome or overall child distress (as measured by the Outcome Rating Scale-Overall, ORS-O) reported at the two-week follow-up (T2) would be predicted by therapeutic alliance as measured by the Session Rating Scale-Overall (SRS-O) at T1.

As hypothesized there was a moderate correlation between outcome (improvements in child distress) as measured by the ORS-O at T2 and perceived empathy or therapeutic alliance as measured by the SRS-O at T1 (see correlations reported in Table 5). Additional analyses also revealed a significant relationship between the number of adults in the home and ORS-O at T2, and between child gender and ORS-O at T2 (see Table 5 for correlations).

A step-wise linear multiple regression was conducted to determine the relative predictive utility of the SRS-O rating (therapeutic alliance), along with other variables collected at T1 for the child's outcome (or reported distress levels) at the two-week follow-up (ORS-O at T2.) In this model, a Durbin-Watson statistic confirms the assumption of independent errors (2.21) for SRS-O. The number of adults in the home moderately correlated with child distress (ORS-O) at T2 ($r = .53$), and accounted for 25% of the variance (beta weight = .51). Results showed that a .34 correlation between therapeutic alliance (SRS-O) at T1 and child distress (ORS-O) at T2 accounted for 19% of the variance (beta weight = .43). The child's gender was added to the equation (child gender and ORS-O at T2, $r = .46$) explaining an additional 14% of the variance (beta weight = .38). Taken together, the three predictors (number of adults in the home, child gender, and SRS-O at T1) accounted for 57% of the variance in parent report of child outcome/distress levels (ORS-O) at T2.

Table 5

Intercorrelations Between Variables

Variable	Child Gender (<i>n</i> = 44)	Adult.home (<i>n</i> = 43)	T1.ORS -O (<i>n</i> = 38)	SRS-O (<i>n</i> = 38)	PAL.Sat (<i>n</i> = 30)	T2.ORS (<i>n</i> =24)
Child Gender	-	.21	.06	.30	.32	.46*
Adult Home		-	.03	.09	.12	.53**
ORS Overall			-	.19	.23	.29
SRS Overall				-	.96***	.34
PAL Satisfaction					-	.31
T2 ORS Overall						-

Note. Correlations are significant at the * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$ level, (2-tailed).

Within the model, beta co-efficients (measured in standard deviations) reveal that adults in the home and child gender had slightly more impact than SRS Overall ratings at T1(see Table 6). An ANOVA compared the outcome ratings at T2 (T2 ORS-O) in stepwise fashion: SRS-O, number of adults in the home, and child gender. In each step, the F -ratios were greater than 1; and $p \leq .05$ in all cases, indicating that the variance discovered through this analysis was unlikely to have happened by chance (see Table 7). T2 ORS Overall was the dependent factor in all steps. Step 1 included SRS Overall at T1 as the one predictive factor, F -ratio is 4.33, $p = .05$; Step 2 added the number of adults in the home as the second predictive factor, F -ratio is 7.05, $p < .01$; and Step 3 added Child Gender as a third predictive factor, F -ratio is 7.73, $p < .01$; indicating that a stepwise linear regression was preferable to comparing means only, as it

significantly improved our ability to predict the outcome behavior/level of distress of the child at T2 as rated by the parent (T2 ORS Overall). Overall, these findings indicate that beyond the fixed variables of number of adults in the home and child gender, therapeutic alliance is the strongest predictive factor of outcome at T2 than any other predictive variable in the study.

Table 6

Multiple Regression Analysis

	<i>b</i>	<i>SE b</i>	β
<i>Step 1</i>			
Constant	-6.37	6.76	
SRS Overall	1.47	.71	.43
<i>Step 2</i>			
Constant	-7.90	5.78	
SRS Overall	1.28	.61	.38
Adults in home	1.53	.54	.51
<i>Step 3</i>			
Constant	-8.16	5.17	
SRS Overall	1.14	.55	.33
Adults in home	1.30	.49	.43
Child Gender	1.58	.67	.38

Note. $R^2 = .19$ for Step 1; $\Delta R^2 = .25$ for Step 2; $\Delta R^2 = .14$ for Step 3 ($ps < .05$).

Table 7

Analysis of Variance for Multiple Regression 3-Step Model

Predictor	<i>df</i>	<i>F</i>	<i>p</i>
Step 1: SRS O	1	4.33	.051
Step 2: SRS O Adult Number	2	7.05	.005
Step 3: SRS O Adult Number			
Child Gender	3	7.73	.002
<i>S</i> within-group error	20	(2.11)	

Note: Values enclosed in parentheses represent mean square errors. *S* = subjects. * $p < .05$, ** $p < .01$.

Chapter 4

Discussion

This study was based on several previous studies describing a “call-in” parenting service which delivered behavioral health interventions to parents via doctoral students in clinical psychology training programs (Kanoy & Schroeder, 1985; Polaha et al., 2007). Those programs also addressed parental concerns regarding development, behavior, and emotional well-being. Although the first parenting call-in program began in 1973, there is continued need for sustainable low-cost behavioral health delivery supporting parents with everyday parenting concerns (Arndorfer et al., 1999; Cooper et al., 2006, as cited in Polaha et al., 2007, p. 2). As previously mentioned, nationally, 60% of primary care visits involve treatment of some behavioral health needs. More relevant to this study, partnering physicians reported roughly two hundred calls per week in one clinic with seven practitioners, each call representing a 45-minute consult on average.

Presenting Problems

Although the need for behavioral services has remained the same, have the types of questions or concerns changed? In looking at concerns expressed by parents in this study, it appears that not much has changed; parents continue to struggle in the discipline of their children. Discipline was the most common referral problem in early programs (Polaha et al., 2007), and discipline continued to be the most common concern in this study with 44% of

parents seeking help for this problem. The need to provide support for parents in the discipline of their children is typically addressed in the pediatrician visit. In survey of pediatricians, Burklow et al. (2001) found that “discipline was the most frequently experienced problem.” This study used a variety of dependent measures to assess the impact of the service on the above problem behaviors. One measure, the ECBI-F assessed parent report of change in frequency of child’s problem behavior. Although the ECBI-F didn’t correlate with other outcome measures, the significant decrease in parent report of child’s problem behaviors suggests that the interventions, parental attention or some combination, had a positive impact on child behaviors.

Differences between Callers and Emailers

Regardless of similarity in parent need for behavioral health support, particularly in the area of discipline, resources continue to change. The vast amount of information and parenting advice available on the Internet can be overwhelming to a parent seeking simple strategies for discipline. In an effort to incorporate a small part of the emerging social media, this study sought to diversify the typical service and include an option for electronic (email) communication. As expected, there wasn’t a difference in the type of parent or type of child concern expressed by the callers when compared to the emailers. Nor was there a significant difference between groups in outcome (assessed at the two-week follow-up.) However, there was a significant difference in the drop-out rate between callers and emailers. Although the low effect size suggested that a larger sample size for emailers at the follow-up contact would not have made a difference in the results of the outcome assessment, the low self-selection of email by parents and a drop-out rate of 87.5 % between the first and second contact was notable.

Therapeutic Alliance

Why were the emailers more likely to discontinue during the first contact or dropout between the first and second contact? Part of the explanation may be found in the differences in therapeutic alliance. Although the differences between the callers and the emailers in their report of the therapeutic alliance or frequency of problem didn't reach statistical significance, the strong effect size suggested that the perceived differences would have been significant with a larger sample. Perhaps the stronger therapeutic alliance experienced by the caller provided the connection that kept her engaged from the first contact through the follow-up. In contrast, the potential lack of alliance experienced by the emailer didn't provide a sufficient enough connection to keep her engaged.

The positive impact of therapeutic rapport on client outcome has been documented in the literature (Lambert, 2001). The results of this study showed that therapeutic rapport exerted a significant influence on outcome even when the relationship was limited to relatively brief phone contact. This finding underscores the importance of therapeutic alliance in non-traditional venues including single-session phone consultations. The unexpected and strong relationship between therapeutic alliance and satisfaction with the PAL program reiterated the relevance of therapeutic alliance in this study. If parents perceived that the responder understood them they reported very high levels of satisfaction with the service (regardless of outcome). Qualitatively, parents reported that the greatest value was in "having someone to call," and "hearing a voice on the other end of the phone," and most importantly, "reassurance that my child is normal."

Several variables were significantly related to outcome (measured at follow-up) including the SRS-O (a measure of therapeutic alliance), number of adults in the home, and child gender.

The number of adults in the home had the greatest impact on behavior improvement at T2, with child gender having slightly less impact (females were more likely to improve), and therapeutic alliance predicted a slightly lesser variance in outcome overall than the number of parents in the home or child gender. Previous research supports this data, in that children with two or more adults living in the home have more protective factors than those who have fewer. Females demonstrated a faster response to treatment regardless of modality, making their gender more predictive of improved behavior two weeks later.

Viability of the Service

In considering the viability of the service, the most important finding was that relatively few contacts were received overall ($n = 63$ over 25 weeks, averaging 2.52 contacts per week). When looking at the call volume from January, 2011 to April 18, 2011, the contacts per week jumped to 3.2 contacts per week, showing response to increased marketing and recruitment efforts. This number exceeded those of previous studies with an average of 1.2 calls per week (Polaha et al., 2007), but falls short of initial studies (Schroeder & Kanoy, 1985 that received 4.3 contacts per week on average (although this study was limited to phone and clinic visits, with frequency of each modality not defined). Only seven emails (out of 30) completed through the T2 follow-up, indicating that email in its current form is not a viable modality for parent satisfaction or the child's behavioral outcome. Possible reasons for poor email follow-through may have been the excessive research question portion of the initial contact script, possible age of parent (parent age not collected), and a reported misperception that the parent needed to be at their computer during the limited hours of operation (two hours, two nights per week).

Another possible reason for the moderate call volume is that the PAL is operated off-site from pediatrician offices and at a significant distance from the primary referring clinic (one hour), and therefore the university's service is less familiar to families. Additionally, if parents have a strong relationship with their primary care provider, it is possible that the parents' needs are being met by their children's providers.

Future Research

Changing the email modality to another form of e-counseling is recommended in further testing the effectiveness of electronic brief behavioral health intervention. Using instant messaging, chat, blogs, face book communities, and so forth may prove to be more effective than email alone. Also, limiting the number of research questions will help to facilitate therapeutic alliance, which as indicated by this study, is predictive of outcome. Rolling responses to emails/chat, etc. 7 days a week may also improve the viability of electronic communication as expectations of response time may differ between phone and email.

As recommended by Polaha et al., (2007), future recommendations would be to rigorously refine the protocols used in addressing the behavioral concerns, and to empirically validate the effectiveness of each brief treatment. Additionally, future research could design the program as an extension of a co-located practice, which would provide adjunctive services for after-hours accessibility as well as providing a free service to the underserved. Another viable research idea is to continue with a T3 contact at two months to rule out an "extinction burst" in behavior that may be taking place at the two-week follow up, confounding current outcome data. And, finally future research may want to explore the differential treatment response between boys and girls.

Summary

This study revealed three major findings: (a) parents were more likely to rate more improvement in their child's behavior if the therapeutic alliance was strong at the initial contact; (b) Email was not the preferred modality as only 11 emails came through as self-selected by the parent during the study period, and (c) The people who used the PAL were different than those targeted by the study; they had higher incomes, more education, and came from homes with more adults. Both qualitative and quantitative data indicated that therapeutic alliance at the initial contact was the strongest predictor in improving children's behavior at the two-week follow-up, with many parents reporting that the connection with the therapist, and expected reassurance at the initial contact was the primary motivator to call the PAL. The measure of therapeutic alliance trumped that of behavioral outcome measures, providing direction for future training efforts for the doctoral student responders, and future ad campaign messaging. The findings on therapeutic alliance may also explain the parents' preferential selection of the pediatrician for behavioral health needs, indicating that a well-trained staff (nurses, MAs) may be able to off-load the pediatrician if these skills are developed. Future research should refine the protocols used and empirically validate their effectiveness in each modality in a variety of settings (e.g., medical clinics, mental health clinics, etc.). The third most important finding was that of social class served (upper middle-class) vs. that which was targeted (lower and working class). This experience corroborates with Schroeder and Kanoy's demographic profile of those served in the initial and long-term study (1985) of the Pediatric Call-In-Hour. Parents who called tended to be upper-middle class (median annual income of approximately \$95,000), who were curious about parenting techniques and were often aware of popular theories and techniques (e.g., attachment

theory). This finding may be due to what prior class research points to as lower and working class stigmas attached to counseling. Edlund et al. (2002, as cited in McAulliffe & Associates, 2008) proclaim that “Low-income clients are often embarrassed about seeing a mental health provider;” and Chalifoux (1996, as cited in McAulliffe & Associates, 2008) and Schore (1990, as cited in McAulliffe & Associates, 2008) go on to say that “the very idea of the therapeutic relationship, with its disclosure, vulnerability, verbal sharing, and expression of emotion is unacceptable in some groups, particularly among the poor and working class” (as cited in McAulliffe & Associates, 2008, pg. 414). It may be due to this phenomena that although there is high perceived need, there is low actual utility due to lower and working class beliefs about counseling and parenting techniques. McAulliffe goes on to pose that “[For members of those classes,] attending counseling often implies that they are deficient in some way, that they are not doing something right.” This research may provide a window into why we primarily received calls from upper middle class parents who “generally value their children being curious and self-directed and want them to demonstrate self-control and responsibility” (Luster, Rhoades, & Haas, 1989, as cited in McAulliffe & Associates, 2008, pg. 414). It is possible that due to this predisposition, upper-middle class families are more likely to reach out to available resources in helping their children overcome developmental issues.

All in all, this research study supports existing data (Schroeder & Kanoy, 1985) that a strong therapeutic alliance can be built and can be effective through brief, telephone-based interventions. Findings indicate that email can be effective, but with larger sample size, failed in all measures of outcome as executed in this study. Parents reported lower frequency of problem behavior overall, and they provided high satisfaction ratings for the service, suggesting that with

fine-tuning of electronic communication future efforts in this program should strive to duplicate therapeutic alliance achieved in the phone modality, or possibly use the electronic medium as a gateway to a more personal connection over the telephone. In answering the hypothetical question, Is this service a cost-effective, viable adjunctive service to primary care for parents and children? the answer would be, yes. While this study garnered fewer contacts per week than previous studies and more than others, it is important to keep in mind that the study was part of a program launch, which essentially was the equivalent of building a practice in 25 weeks. With targeted marketing efforts, excellence in training, and limiting research study questions, this program could be a viable and cost-effective means of reaching out to those without resources as well as being an adjunctive service to the primary care setting.

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Appendix A

Script with Embedded Session Rating Scale and Outcome Rating Scale

Final Parent Advice Line Script with Embedded ECBI, ORS and SRS

**George Fox University
Parent Advice Line (PAL) Program
T1 Response Sheet**

Date: _____

Beginning Time: _____

Step 1: Clinician Greeting & Informed Consent

Clinician: “Good Evening, you have reached the George Fox University Parent Advice Line, this is (use your first name only), are you calling about a child in your care?”

Yes = 1

No = 2

“Is this your first contact with George Fox University’s Parent Advice Line?”

Yes = 1

No = 2

If no, ask when they had previous contact, record: _____, ask if they prefer:

Phone = 1

Email = 2

Other = 3 – skype, chat, IM

Clinician: “Is the child suffering from or has he or she suffered from a major accident or illness?” **Yes/No**

If yes: “I’m sorry, I will not be able to help you with this particular concern, but I would like to refer you to...” Refer back to pediatrician or ER if an emergency or in need of immediate attention.

If no: “I will be happy to help you out with your concern. But before we proceed I need to remind you that by calling this number you have agreed to participate in a research study to test the effectiveness of phone vs. email versions of this program. You should be aware that doctoral students will provide treatment, and will be supervised by a licensed psychologist. Everyone receives treatment, unless we feel that we can’t help you, in which case we will refer you to an expert. If for any reason you are dissatisfied with our service, please know that you can contact our supervisor, Dr. Joel Gregor, his phone number is (503) 544-2367. “I would also like to let you know that we will keep your information confidential, unless you inform us that someone is

being harmed – either you, your child or any other family member, or that any of the above have intent to harm someone else or themselves. Would you like to continue?”

Yes = 1

No=2

If No: “Can I refer you to (name appropriate service such as crisis line, etc.)? Respond to request. Thank you for contacting us, please consider calling us back if we can be of help.”

Step 2: Modality Assignment (skip if repeat contact – go to step 5))

Clinician: “Great, do you have access to a computer?” **Choose from below:**

Yes, has computer access = 1, If yes: Assign to modality (see random number chart, cross off number after assignment). Record random assignment:

1= phone

2 = email

Clinician: “ You have been assigned to: (tell them that they have been assigned to either phone or email communication)”

No = 2 If No Computer Access

skip to Step 3

If the caller is assigned to email, say:“You have been randomly assigned to the email group, may I get your email address in order to continue our conversation?”

Caller’s email address (repeat it back to them to confirm):

Say, “Great, if for some reason you don’t see an email from me in the next few moments, please try emailing me at pal@georgefox.edu. This is the email address that we will be communicating with from here on out.

Yes, has computer but prefers phone = 3, continue on phone, go to step 3

Yes, has computer, but prefers to use skype, chat, IM or other = 4 try to accommodate request if possible

Step 3: Continued Informed Consent in Designated Modality

(Informed consent about how the program works)

Clinician: “I’d like to ask you some questions before we get started, and at the end of our conversation I will ask you more questions about your experience on the call. Someone from our clinic will follow-up with you in 2 weeks to see how your child and family are doing, and we will ask you some of the same questions that we ask at the end of tonight’s call. Do you have any questions before we get started?”

Step 4: History & Demographics

Clinician: “I’ll need to ask you some questions about your family before we can get started:”

1) What is your relationship to the child? Write down exact words, and categorize:

1 = Parent

2 = Foster parent

3 = Grandparent

4 = Other

2) May I ask who referred you to the “George Fox University Parent Advice Line?”

Name: _____ Phone #: _____ Location: _____

(It’s OK if they don’t have the phone#, name and city is required)

2) How old is your child?

Enter exact age: _____

3) What is the gender?

M = 1

F = 2

4) What year in school? Write down exact words - Choose year in school:

Enter: 1 for 1st grade, 2 for 2nd and so on, 3, 4, 5, 6, 7, 8 , 9, 10, 11, 12, Too young for school: 13, PS = 14, Kindergarten = 15, School age but not attending = 16

5) How many children are living in the home? Record exact number

6) Which county do you live in? Write down exact words and choose:

1 = Multnomah

2 = Yamhill

3 = Marion

4 = Washington

5 = Other

7) How many years of education have you completed? Write down exact words and choose:

6,7,8,9,10,11,12, Bachelors=16 (12-16 record exact #), Graduate 16+length of time to complete, record: master's or doctorate?

8) How many adults are living in the home? Record exact #:

9) What is your child's ethnicity? Write down exact words, categorize as follows (check as many as apply):

1 = African American

2 = Asian (includes Pacific Islander)

3 = Caucasian

4 = Hispanic

5 = Native American (includes Alaskan Native)

6 = Other

10) What types of help have you sought for your child in the past (for example through your pediatrician, through school, etc.) Write down exact words, categorize as follows (check as many as apply):

1) Pediatrician/Nursing Line

2) Crisis line

3) Pastor/Church leader

4) Police/legal counselor

5) Psychologist/Counselor

6) School personnel: teacher, school counselor, etc.

7) Other

11) Has your child ever received a psychiatric diagnosis? Write down exact words –if YES: “What was the diagnosis given?”

Diagnosis: Yes = 1

No = 2

12) Is there a family history of a similar diagnosis? (If necessary, clarify: You, your parents or siblings?) – Write down exact words

Family History of diagnosis: Yes = 1

No = 2

13) Can you tell me roughly what your annual household income is? (A ballpark is fine) – Write down exact #, and record in the following categories:

1) 0-12,000 per year

2) 12-25,000 per year

3) 25-50K per year

4) 50-75K per year

5) 75 -100K per year

6) 100-150K per year

7) 150-200K per year

8) 200K + per year

Step 5: Problem Clarification & Intervention/Eyberg Duration/Freq. & Intensity

Clinician: “Now that we are done with our initial questions, let’s talk about what is going on...can you describe the problem?”

If repeat contact, say, “What is going on with (name) – can you describe the problem?”

Operationalize the problem, then select from the following categories:

ENTER PROTOCOL #:

If not included in protocols/problems record concern: _____

(refer to appropriate agency if necessary)

Clinician: “This is a problem that we typically see in children the age of your child. How long has this been going on? Record exact words: _____

Duration = days weeks months years

Eyberg Intensity & Problem Scales:

How often does this occur with your child?

Is this a problem for you?

Never Seldom Sometimes Often Always

Yes=1/No=2

1 2 3 4 5 6 7

Clinician: “Can you tell me more about what happens right before, or what seems to trigger the problem?”

What are some of the things you have tried in the past to help your child?

Here are some helpful tips that may help you and your child”: Refer to protocol book

[Clinician provides verbal/email intervention, and integrates it into the child’s circumstances.]

Clinician: “Does this make sense?” Clinician repeats intervention, or modifies it to the caller response.

Step 6: Clinician Follow-Up

Clinician: “I would like to send you an information sheet that talks about this particular problem and gives helpful tips. Would you like to receive it through email or have it sent to you by mail?”

[Clinician either gets address/email address.]

1 = Mailing Address:

2 = Email address:

CALLER NAME: _____ first only is o.k.

Clinician: “What is the best way to reach you at for the 2-week follow up?”

Contact phone number(s)- Choose:

1 = House Phone:

2 = Cell:

3 = Email address:

Step 7: Baseline Outcome/Satisfaction Survey

Clinician (ORS, SRS Oral Administration): “Great, now I am going to ask some questions about functioning in four different areas of your child’s life. Each of these questions is based on a 1 to 10 scale, with 10 being high or very good, and 1 being low or very bad.

Clinician: “Thinking back over the last week, how would you rate:”

1. How your child has been doing **personally** (on the scale from 1 to 10)
 - a. if the **client asks for clarification**, you should say, “how have they been doing?”
 - b. If the **client gives you two numbers**, you should ask, “which number would you like me to put?” or “is it closer to X than Y?”
 - c. If the **client gives one number for one area of child functioning, and offers another number for another area of functioning**, then ask the client for an average.

1 2 3 4 5 6 7 8 9 10

2. “How things have been going in your child’s **relationships?**”
 - a. If the **client asks for clarification**, you should say “in your family,” “in their close personal relationships.”
 - b. If the **client gives you two numbers**, you should ask, “Which number would you like me to put?” or, “is it close to X than Y?”
 - c. If the **client gives one number for one family member, or relationship type**, then ask the client for an average.

1 2 3 4 5 6 7 8 9 10

3. “How things have been going for them **socially?** (on the scale from 1 to 10)”
 - a. If the **client asks for clarification**, you should say, “his/her life outside the home or in your community, “ school, church, scouts, sports.”
 - b. If the **client gives you two numbers**, you should ask, “which number would you like me to put?” or “is it closer to X than Y?”
 - c. If the **client gives one number for another aspect**, then ask the client for an average.

1 2 3 4 5 6 7 8 9 10

4. “So, given your answers on these specific areas of your child’s life, how would you rate how things are in your child’s life **overall?**”

1 2 3 4 5 6 7 8 9 10

Clinician: “Now I am going to ask some questions about your experience today:”

5. “On a scale of 1-10, to what degree did you **feel heard and understood today?**”

1 2 3 4 5 6 7 8 9 10

6. “On a scale of 1-10, to what degree did **we work on the issues that you wanted to work on today?**”

1 2 3 4 5 6 7 8 9 10

7. “On a scale of 1-10, how well did my approach, **the way I worked, make sense and fit for you?**”

1 2 3 4 5 6 7 8 9 10

8. “So, given your answers on these specific areas, how would you rate how things were in today’s session **overall**, with 10 meaning that the session was right for you, and 1 meaning that something important was missing from the visit?”

1 2 3 4 5 6 7 8 9 10

9. On a scale of 1-10, how satisfied have you been with George Fox University’s Parenting Advice Line?

1 2 3 4 5 6 7 8 9 10

Clinician: I noticed you gave low scores on XXX above, can you tell me more about that? (only ask this question if it did not come up in the presenting problem) – otherwise move on with close of call.

Step 8: Closing

Clinician: “Would you like for me to follow-up with your pediatrician?” **Yes = 1/No = 2**

If Yes: “What is their name?” Record exact name, location, and phone# if available

If Yes: I will be sending a fax as a follow-up to them, it will just give a brief comment as to the nature of our discussion, along with the tips that we discussed.

If No: Continue on

As we mentioned before, we’ll be back in touch with you in 2 weeks to ask you to rank your child’s behavior for the problem we discussed tonight, and to see how your child is doing in general. Thank you for your participation in our study, we hope that the advice we have given you tonight will be helpful.

We look forward to talking with you soon, Good-bye.

Does the caller try to continue the conversation addressing other problems with the child?
Record:

Yes = 1

No = 2

If yes, say,” I’d like to help you out with this, let’s be brief. [clarify and document problem on separate response sheet starting at step 5, and adapt conversation – do not repeat demographic questions or ORS & SRS questions. DO REPEAT EYBERG Scale for duration, frequency and intensity.

Therapist Signature: _____

Date: _____ **End Time:** _____

Total Time of Call: _____

Additional Comments:

STOP STOP STOP STOP STOP STOP

T2 Follow Up

Date: _____ **Beginning Time:** _____
ID#: _____

Conversation 1:

“Good Evening, this is _____ with the George Fox University Parent Advice Line. I am contacting you to follow up regarding your child’s behavior concern that we discussed 2 weeks ago. I would like to ask you a set of questions that will allow us to assess how he/she is doing.”

How often is the problem occurring with your child? Is this a problem for you?

Never	Seldom	Sometimes	Often	Always		Yes=1/No=2
1	2	3	4	5	6	7

Conversation 2:

Now I am going to ask you more global questions about how he/she is doing:

“Thinking back over the last week, how would you rate?”

1. How your child has been doing **personally** (on the scale from 1 to 10) “how have they been doing?”

1 2 3 4 5 6 7 8 9 10

2. “How have things have been going in your child’s **relationships**? in your family,” “in their close personal relationships.”

1 2 3 4 5 6 7 8 9 10

3. “How things have been going for them **socially**? (on the scale from 1 to 10)”“ in his/her life outside the home or in your community, “ school, church, scouts, sports, etc.”

1 2 3 4 5 6 7 8 9 10

4. “So, given your answers on these specific areas of your child’s life, how would you rate how things are in your child’s life **overall**?”

1 2 3 4 5 6 7 8 9 10

“In general, how satisfied were you with the George Fox University Parent Advice Line? – on a scale of 1-10, with 1 being not at all satisfied and 10 being extremely satisfied”

1 2 3 4 5 6 7 8 9 10

“Do you have any suggestions for improvements?”

Thank you very much for your time. If you have further concerns I would encourage you to call the George Fox University Parent Advice Line main number: (503)554-2366, and be sure to let them know that you are a return caller. We appreciate your participation in our study, and we hope the program has been of help to you and your child.

Have a good evening, Good-bye.

Signature: _____

Date: _____

End Time: _____

Total Time of Contact: _____

***Please attach this sheet to the original T1 Response sheet/Email Response Sheet.**

Note. From *ORS & SRS* by S. Miller, _____, 2001, p. _____. Copyright _____ by _____ . Adapted with permission.

Appendix B

Email Responder Script, T1 & T2

T1 & T2 Email Response sheet

1/12/11

Clinician: Start the email conversation with cutting and pasting the SHADED AREAS ONLY in the following order:

Conversation 1:

Thank you for contacting the Parent Advice Line at George Fox University's Behavioral Health Clinic.

Before we proceed I need to remind you that by emailing this service you have agreed to participate in a research study to test the effectiveness of phone vs. email versions of this program. You should be aware that doctoral students will provide treatment, and will be supervised by a licensed psychologist. Everyone receives treatment, unless we feel that we can't help you, in which case we will refer you to an expert. If for any reason you are dissatisfied with our service, please know that you can contact our supervisor, Dr. Joel Gregor at (503) 554-2368.

I would also like to let you know that we will keep your information confidential, unless you inform us that someone is being harmed – either you, your child or any other family member, or that any of the above have intent to harm someone else or themselves. By replying to this email you are implying your consent to the limitations of confidentiality associated with this program.

Would you like to proceed?

Conversation 2:

Are you emailing about a child in your care?

Is this your first contact with George Fox University's Parent Advice Line?

Is the child suffering from or has he or she suffered from a major accident or illness?

Conversation 3:

I'd like to ask you some questions before we get started, and at the end of our conversation I will ask you more questions about your experience tonight. Someone from our clinic will follow-up with you in 2 weeks to see how your child and family are doing, and we will ask you some of the same questions that we ask at the end of tonight's contact. Do you have any questions before we get started?"

Clinician: Respond to any questions before proceeding. After responding, proceed with Demographic questions:

Conversation 4: Demographic Questions

“I’ll need to ask you some questions about your family before we can get started:”

1) What is your relationship to the child? Check one:

1 = Parent _____

2 = Foster parent _____

3 = Grandparent _____

4 = Other _____

2) May I ask who referred you to the “George Fox University Parent Advice Line?”

Name: _____ Phone # if available: _____

Location: _____

(It’s OK if you don’t have the phone#, name and city is required)

2) How old is your child?

Enter exact age: _____

3) What is the gender? Check one:

M = 1 _____

F = 2 _____

4) What year in school?

5) How many children are living in the home?

6) Which county do you live in? Check one:

1 = Multnomah _____

2 = Yamhill _____

3 = Marion _____

4 = Washington _____

5 = Other _____

7) How many years of education have you completed?

8) How many adults are living in the home?

Conversation 5:

9) What is your child's ethnicity? Check as many as apply:

1 = African American_____

2 = Asian (includes Pacific Islander)_____

3 = Caucasian_____

4 = Hispanic_____

5 = Native American (includes Alaskan Native)_____

6 = Other_____

10) What types of help have you sought for your child in the past (for example through your pediatrician, through school, etc.) Check as many as apply:

1) Pediatrician/Nursing Line_____

2) Crisis line_____

3) Pastor/Church leader_____

4) Police/legal counselor_____

5) Psychologist/Counselor_____

6) School personnel: teacher, school counselor, etc._____

7) Other_____

11) Has your child ever received a psychiatric diagnosis?

Diagnosis: 1 = Yes_____

2 = No_____

12) Is there a family history of a similar diagnosis?

Family History of diagnosis: 1=Yes

2=No

13) Can you tell me roughly what your annual household income is? (A ballpark is fine)

Conversation 6: Defining the problem

“Now that we are done with our initial questions, let's talk about what is going on...can you describe the problem?”

Operationalize the problem, then select from the protocol menu found in the protocol book:

ENTER PROTOCOL #:

If not included in protocols/problems record concern: _____

(refer to appropriate agency if necessary)

Conversation 7: Eyberg Intensity Scales/Intervention Delivery

“This is a problem that we typically see in children the age of your child. How long has this been going on?”

How often does this occur with your child?

Is this a problem for you?

Never Seldom Sometimes Often Always

Yes=1/No=2

1 2 3 4 5 6 7

“Can you tell me more about what happens right before, or what seems to trigger the problem?”

What are some of the things you have tried in the past to help your child?

Here are some helpful tips that may help you and your child”:

Refer to protocol book

[Clinician provides verbal/email intervention, and integrates it into the child’s circumstances.]

“Does this make sense?”

Clinician repeats intervention, or modifies it to the caller response.

Conversation 8: Follow-up contact information

“I would like to send you an information sheet that talks about this particular problem and gives helpful tips. Would you like to receive it through email or have it sent to you by mail?” Please provide information for your preference:

1=Mailing Address:

2 = Email address:

CALLER NAME: _____ first only is o.k.

“What is the best way to reach you at for the 2-week follow up?”

Contact phone number(s)- Choose one:

1 = House Phone:

2 = Cell:

3 = Email address:

Conversation 9: ORS/SRS

“Great, now I am going to ask some questions about functioning in four different areas of your child’s life. Each of these questions is based on a 1 to 10 scale, with 10 being high or very good, and 1 being low or very bad.

“Thinking back over the last week, how would you rate:”

5. How your child has been doing **personally** (on the scale from 1 to 10) “how have they been doing?”

1 2 3 4 5 6 7 8 9 10

6. “How things have been going in your child’s **relationships?**” “in your family,” “in their close personal relationships.”

1 2 3 4 5 6 7 8 9 10

7. “How have things have been going for them **socially?** (on the scale from 1 to 10)” “in his/her life outside the home or in your community, “ school, church, scouts, sports, etc.”

1 2 3 4 5 6 7 8 9 10

8. “So, given your answers on these specific areas of your child’s life, how would you rate how things are in your child’s life **overall?**”

1 2 3 4 5 6 7 8 9 10

“Now I am going to ask some questions about your experience today:”

5. “On a scale of 1-10, to what degree did you **feel heard and understood today?**”

1 2 3 4 5 6 7 8 9 10

6. “On a scale of 1-10, to what degree did **we work on the issues that you wanted to work on today?**”

1 2 3 4 5 6 7 8 9 10

7. “On a scale of 1-10, how well did my approach, **the way I worked, make sense and fit for you?**”

1 2 3 4 5 6 7 8 9 10

8. “So, given your answers on these specific areas, how would you rate how things were in today’s session **overall**, with 10 meaning that the session was right for you, and 1 meaning that something important was missing from the visit?”

1 2 3 4 5 6 7 8 9 10

9. On a scale of 1-10, how satisfied have you been with George Fox University’s Parenting Advice Line?

1 2 3 4 5 6 7 8 9 10

If the client responds with a low score, fill in the blank below and ask the following:

“ I noticed you gave low scores on _____ above, can you tell me more about that?”

Conversation 10: Pediatrician Follow-up

“Would you like for me to follow-up with your pediatrician?” Choose one:

1 = Yes

2 = No

If Yes: “What is their name?” Provide exact name, location, and phone# if available

If Yes: I will be sending a fax as a follow-up to them, it will just give a brief comment as to the nature of our discussion, along with the tips that we discussed.

Conversation 11: Close of call

As I mentioned before, we’ll be back in touch with you in 2 weeks to ask you to rank your child’s behavior for the problem we discussed tonight, and to see how your child is doing in general. Thank you for your participation in our study, we hope that the advice we have given you tonight will be helpful.

We look forward to contacting you soon, Good-bye.

****Clinician: When finished, upload entire conversation to foxfiles – be sure to sign and date and record time of contact below.**

Therapist Signature: _____

Date: _____

End Time: _____

Total Time of Contact: _____

Additional Comments:

1 2 3 4 5 6 7 8 9 10

7. “How things have been going for them **socially**? (on the scale from 1 to 10)”“ in his/her life outside the home or in your community, “ school, church, scouts, sports, etc.”

1 2 3 4 5 6 7 8 9 10

8. “So, given your answers on these specific areas of your child’s life, how would you rate how things are in your child’s life **overall**?”

1 2 3 4 5 6 7 8 9 10

“In general, how satisfied were you with the George Fox University Parent Advice Line? – on a scale of 1-10, with 1 being not at all satisfied and 10 being extremely satisfied”

1 2 3 4 5 6 7 8 9 10

“Do you have any suggestions for improvements?”

Thank you very much for your time. If you have further concerns I would encourage you to call the George Fox University Parent Advice Line main number: (503)554-2366, and be sure to let them know that you are a return caller. We appreciate your participation in our study, and we hope the program has been of help to you and your child.

Have a good evening, Good-bye.

Signature: _____

Date: _____

End Time: _____

Total Time of Contact: _____

***Please attach this sheet to the original T1 Response sheet/Email Response Sheet.**

Appendix C
Curriculum Vita

Curriculum Vita

Tabitha S. Becker

6223 SW Meridian Way

Tualatin, Oregon 97062

tbecker04@georgefox.edu

503.720.9234

April 4, 2011

Education

- 2010 – present **Masters of Arts, Doctoral Candidate**
Graduate Department of Clinical Psychology: **APA Accredited**
George Fox University, Newberg, Oregon
(Degree Anticipated Spring 2012)
- Graduate Student**
- 2006-present George Fox University, Graduate Dept. of Clinical Psychology
- 2000 - 2001 Pacific University, Graduate Department of Counseling Psychology
- 1980-1984 **Bachelor of Arts, Non-Broadcast Communications**
Pacific University
Forest Grove, Oregon

Supervised Clinical Experience

- January 2009 – present **Pre-Practicum**
George Fox University Health and Counseling Center, Newberg, Oregon
- Responsibilities*
- Conduct intake interviews and formulate assessment reports.
 - Provide brief individual therapy.
 - Engage in treatment planning with client.
 - Consult with and present cases to a multidisciplinary mental health team.
- Supervision*
Individual and group, including weekly didactics
- Supervisors*
Clark Campbell, Ph.D. and Mary Peterson, Ph.D.

- September 2009-
December 2010
- Practicum I**
Clark County Juvenile Court, Vancouver, WA
- Responsibilities*
- Provide brief individual therapy – inpatient & outpatient
 - Facilitate group therapy
 - Conduct assessment and write reports
- Supervision*
Individual and group, including weekly didactics
- Supervisors*
Shirley Shen, Ph.D., Winston Seegobin, Ph.D., & Mary Peterson, Ph.D.
- January, 2010 -
June, 2010
- Practicum I – Continued**
North Marion School District, Special Ed Programs Aurora, OR
- Responsibilities*
- Assessment & Evaluation grades K-12, including children with ASD and other learning disabilities
 - Group development & facilitation
 - Individual Therapy (1:1)
- Supervision*
Individual and group
- Supervisors*
Susan Patchin, Ph.D., Nancy Thurston, Ph.D., Mary Peterson, Ph.D., Sharon Lohse, MA
- August, 2010 –
present
- Sundstrom Clinical Services**
- Responsibilities*
- Individual & family therapy for children
- September, 2010 –
present
- Oregon Health Sciences University,
Child Development and Rehabilitation Center**
Pediatric Neuro Development Clinic
- Responsibilities*
- Assessment and evaluation of children with developmental and learning disabilities
 - Intake interview, test administration, scoring, interpretation, feedback and reporting
 - In-patient Consultation, report writing – Doernbecher Children’s Hospital/OHSU
- September, 2008 -
present
- George Fox University Parent Advice Line**
- Responsibilities*
- Developed, funded (through grant writing) and launched evidence-based advice line for parents who have questions about normal, developmental problems
 - Wrote protocol book for top 20 most common problems
 - Developed community partners (pediatricians, etc.) for referral

- base
- Respond to parent calls and emails 4-6 evenings per month
- Marketing through TV, brochure distribution and print advertising of program
- Research (dissertation); types, frequencies, outcomes and satisfaction between modalities
- Developed and serve on an advisory board for the GFU Behavioral Health Clinic
- Program evaluation (research and reporting to funding and community partners)

Related Experience

- | | |
|-------------|---|
| 2000 – 2002 | <p>Group Facilitator
 The Dougy Center, Portland, Oregon</p> <p><i>Responsibilities</i></p> <ul style="list-style-type: none"> ▪ Assisted Children and families in grief process ▪ Assisted in group facilitation and one-on-one interaction with children ▪ Observed adult groups ▪ Identified “at-risk” children for intervention referral ▪ Received thorough training and participated in group supervision <p><i>Supervisor</i>
 Donna Schuurman, Ph.D.</p> |
| 1985-1986 | <p>Physical Therapist Assistant
 Good Sheppard Home, Hillsboro Oregon</p> <p><i>Responsibilities</i> included working with adults with moderate to severe developmental disabilities in preparing for and assisting in the physical therapy session.</p> |
| 1985-1986 | <p>Physical Therapy Assistant
 Tuality Community Hospital, Hillsboro, Oregon</p> <p>Assisted staff physical therapists in preparation for treatment of in-patient and out-patient clients.</p> |
| 1984-1986 | <p>Patterning Assistant
 Hillsboro, Oregon</p> <p>Assisted in patterning and sensory stimulation with severe cerebral palsy patient in helping to gain developmental milestones.</p> |

Grant Awards

- November 2009 **\$151,800.00** Recipient of Swindells Charitable Trust Grant . Capital funding for GFU Pediatric Behavioral Health Clinic and pediatric programs.
- January 2010 **\$3,807.00** Recipient of Richter Scholar Grant. Dissertation research grant – “Supporting pediatric primary care through a Pediatric Call-In-Hour.”
- November, 2010 **\$65,000.00** Recipient of Maybelle Clark MacDonald Fund grant for pediatric programs funding for GFU Behavioral Health Clinic. Programs include Parent Advice Line and Pediatric Obesity Program
- March 12, 2010 **Other Grant Related Activities**
Presentation to the Board of Trustees, George Fox University: Pediatric Programs and the George Fox University Behavioral Health Clinic
- January, 2011 Advisory Board President; Behavioral Health Clinic, George Fox University. Responsible for identifying and recruiting board members who will continue to support pediatric programs

Community Involvement

- 1997-2007 **Instructional Assistant, Reading, Math, Writing Exploration Learning Schools, Lake Oswego, Oregon**
Bridgeport Elementary School, Tualatin, Oregon
Boeckman Creek Primary, Wilsonville, Oregon
Responsibilities included assisting instructor in assessment and working one-on-one and in small groups with children in developing skills in reading, math and writing. Also assisted in Art Literacy program in teaching children about famous artists/genres, and leading class art projects within the genres.
Supervisor: Charlotte Morris
- 1999 - 2008 **Teacher and Teaching Assistant**
Church of the Resurrection Catholic Parish, West Linn, Oregon
Pre-school thru 3rd grade *Religious Education*
Duties included developing class plans based on established curriculum, and teaching the subjects through various modalities including lecture, art, and drama.
Supervisor: Barbara Davis

Presentations and Publications

-
- August, 2010 Poster, APA Annual Convention. San Diego, CA. Convergent Validity Study Of Forensic Adjudicative Competence Tests: McCAT-CA V CAST-MR. Diomaris E. Jurecska, MA; Mary Peterson, PhD, Tabitha Becker, MA.
- Symposium Presentation, APA Annual Convention, San Diego, CA. Starting Well – Using Evidence-Based Practice in Practicum Training: Practicum Training: Facilitating Groups in a Community Mental Health Setting. Michelle S. Anderson, MA, Diomaris E. Jurecska, MA, and Tabitha S. Becker, MA.
- August 2011 Poster accepted, APA Annual Convention. Washington, D.C. (2011). Graduate training in group psychotherapy: Exploring the impact of therapeutic factors.

Non-Related Work Experience

- 1984-2008 **Marketing and Advertising Executive**
Media West, Graphic Media, Portland, Oregon
Intel Corporation, Hillsboro, Oregon
Becker Communications, LLC, Tualatin, Oregon
 Responsibilities included developing marketing campaign strategies based on consumer research. Worked with multiple product development teams in taking consumer products to market. Worked with ad agencies in developing advertising, retail merchandising, and collateral for product marketing in the high-tech industry (Intel, Microsoft), and in the food industry (Starbucks, Barhyte Specialty Foods).

Professional Conferences and Seminars

- March 16, 2011:* “Neurobiological effects of trauma” Anna Berardi, PhD
- February 23, 2011:* “Child custody evaluations: not for everyone. Review of recent APA practice guidelines" Wendy Bourg Ransford, PhD
- October 27, 2010:* “Best practices in Multi-cultural assessment” Eleanor Gil-Kashiwabara, PhD
- October 6, 2010:* “Primary Care Behavioral Health: Where Body, Mind (& Spirit) Meet” Neftali Serrano, PhD
- June 4, 2010:* “Outcomes Measure, Reimbursement, and the Future of Psychotherapy” Jeb Brown, PhD

June 4, 2010: “The Wechsler Memory Scale-4th Edition: Overview and Use with the Advanced Clinical Solutions for the Wechsler Scales” James A. Holdnack, PhD

March 17, 2010: “Current Guidelines For Working With Gay, Lesbian, and Bisexual Clients; The new APA practice guidelines” Carol Carver, PhD.

February 17, 2010: “Integrative and Clinical Dimensions of Gratitude” Phil Watkins, PhD.

November 2009: “Time Management for Graduate Students” Jill Banks, MA

October 2009: “Current Practices in the Identification of Eligibility for Special Education Services” Lopez-Haugen, PhD

September 23, 2009: “Multi-cultural counseling: An alternative conceptualization” Carlos Taloyo, PhD

June 5, 2009: “The MMPI-2-RF” Yosef Ben-Porah, PhD

April 8, 2009: “Treatment and teaching interventions for children with Autism” Gary Mesibov, PhD

January 2009: “Recognizing the Symptoms and Understanding the Experience of Neuropsychological Disorders: A Workshop for Non-Neuropsychologists” Alfred W. Kaszniak, PhD, ABPP (CN)

November 2008: “Making Behavioral Health Primary: Primary Care Psychology” Julie A. Oyemaja, Psy.D.

October 29, 2008: “Towards a Global Christian Psychology: re-considering culture and context” J. Derek McNeil, PhD

November 2006: “Integrative Cognitive Interpersonal Psychotherapy” Mark McMinn, Ph.D., ABPP

April 6, 2005: “Motivational Interviewing: Theory, Practice, and Evidence” Denise Walker, PhD.

April 5, 2006: “Healing Images of God” and “Making Terminations Count” Beth Brokaw, MSW, PhD

August 13, 14, 2010: APA, Annual Convention; San Diego, CA.
Symposium: Telepractice – “Addressing key Issues in Telepsychology” Maureen Testoni, JD
Symposium: “Improving Outcomes for Children with Traumatic Brain Injury” H. Gerry Taylor, PhD

Symposium: “Evidence-Based Approaches for Assessment of Preschool-Aged Children” Alice S. Carter, PhD

Professional Affiliations and Memberships

2008-Present American Psychological Association, Student Affiliate
 2008-Present Oregon Psychological Association, Student Affiliate

Relevant Coursework

Theory, Practice, Research

CPSY = Pacific University, PSYD = George Fox University

PSYD 517 Ethics for Psychologists
 CPSY 501 Human Growth & Development
 PSYD 585 Behavioral Interventions
 PSYD 530 Clinical Foundations to Treatment (Pre-practicum)
 PSYD 531 Clinical Foundations to Treatment 2 (Pre-practicum)
 PSYD532-533 Practicum I
 PSYD534-535 Practicum II
 PSYD 502 Psychopathology
 PSYD 501 Theories of Personality and Psychotherapy
 PSYD 592 Consultation, Education & Program Evaluation
 PSYD 503 Learning, Cognition & Emotion
 PSYD 552 Cognitive Behavioral Therapy
 PSYD 571 Integrative Approaches to Psychotherapy
 PSYD 551 Psychodynamic Psychotherapy
 PSYD 563 Family & Marriage Psychotherapy
 PSYD 541 Multicultural Psychotherapy*
 PSYD 507 History & Systems of Psychotherapy
 PSYD 585 Health Psychology
 PSYD 504 Social Psychology
 PSYD 582 Substance Abuse
 PSYD 509 Biological Basis of Behavior
 PSYD 513/CPSY 521 Advanced Statistics and Research Design
 PSYD 512 Statistics
 PSYD 600-601 Dissertation – Research Team
 PSYD 602-603 Dissertation – Research Team
 PSYD 604 Dissertation – Research Team*

Assessment

PSYD 521 Personality Assessment
PSYD 511 Psychometrics in Assessment
PSYD 522 Cognitive Assessment
PSYD 525 Neuropsychological Assessment

* denotes class currently in progress

Cumulative GPA = 3.88