THE ROLE OF PARENTING FACTORS IN PEDIATRICIAN IDENTIFICATION OF CHILDREN WITH PSYCHOSOCIAL PROBLEMS

A thesis submitted
to Kent State University in partial fulfillment of the requirements for the degree of Master of Arts

by
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INTRODUCTION

Data suggest that between 17-20% of children have a diagnosable psychological disorder. Externalizing disorders, such as Conduct Disorder, Oppositional Defiant Disorder, and Attention-Deficit Hyperactivity Disorder compose the majority of disorders in children and adolescents, with about 12% of children exhibiting these types of disorders (Briggs-Gowan, Horwitz, Schwab-Stone, Leventhal, & Leaf, 2000). When untreated, externalizing behavior problems tend to be stable over time and can lead to negative outcomes in adulthood, such as impaired school and social functioning, problems with the law, and Antisocial Personality Disorder (Clairizio, 1997). These problems also tend to be associated with other mental health issues, such as internalizing disorders and impulse control problems. Although effective treatments are available for externalizing behavior problems (Brestan & Eyberg, 1998; Kazdin & Weisz, 2003), only 2% of children with any diagnosable behavioral or emotional problem are seen in a given year by a mental health professional (Costello, 1986). Over time, these problems become more resistant to treatment (Webster-Stratton & Reid, 2003) and lead to rejection by peers, teachers, and even parents (Loeber & Farrington, 2000), which maintains the behavior problems and can lead to internalizing disorders that are commonly comorbid in children with externalizing disorders (Nock, Kazdin, Hiripi, & Kessler, 2007). Primary care physicians (PCPs) operate professionally in an environment that is unique in that most children are seen by a PCP at least once in a given year, and PCPs can often
facilitate treatment of mental health concerns. The present study sought to examine parental factors related to whether or not a pediatrician identifies a child as having a psychosocial problem.

Primary care pediatricians (PCPs) and schools provide unique opportunities for the prevention and early intervention of child mental health problems. Virtually all children are seen in both settings during any given year, which brings about opportunities for large scale screening of psychosocial problems. However, with limited budgets, schools are often unable to afford the costs of identifying and referring children with these problems to appropriate sources of treatment. PCPs are in an environment that is already aimed towards screening and treating health problems, often have access to potential referral sources for parents and families, and have the ability to be the first step in providing sources of help for children with mental health problems. PCPs also may be able to give the family advice that could help prevent further psychological disruption and disorder. Even though PCPs are in an environment that is appropriate for the identification and referral of children with psychosocial problems, only about 15% of children with such problems are identified by their PCP (U.S. Department of Health and Human Services, 1999).

In recent years, PCPs have been given the term “gatekeeper” of mental health care for children because some health insurance companies may not pay for psychological treatment without initial referral by a PCP (Dulcan et al., 1990). In addition, parents seek advice from them about psychosocial problems with their children, and PCPs become the first step in obtaining treatment (Gardner, et al., 2000). Well validated, brief screening
measures of psychosocial dysfunction, such as the Pediatric Symptom Checklist (Jellinek, Murphy, & Burns, 1986), are available to PCPs and can be completed in waiting rooms quickly so that PCPs can have an idea of whether or not they should be concerned about the functioning of the child before they speak with the parent (Pagano, Cassidy, Little, Murphy, & Jellinek, 2000). If used on a large scale, these types of measures have the potential to give PCPs a much higher rate of identification of children with psychosocial problems, and the opportunity to provide access to intervention for children with minor behavior problems before they reach a clinical level.

Psychosocial problems have been referred to as the “new morbidity” in primary health care due to increasing presentation by parents to PCPs for treatment of psychosocial disturbance in their child (Costello, 1986, p. 1044). In one survey of 431 parents, PCPs were the third most likely sought after source of help with parenting problems, with family and friends as the only resources that were sought after more frequently (Keller & McDade, 2000). However, in the same study, a comparison group of low-income parents reported seeking help from health care providers far less frequently, in lieu of books, videos, and telephone helplines. This finding is consistent with previous research that suggests that parents with low socioeconomic status prefer for their physician to only discuss medical issues and have less discussion about psychological issues (Cheng, Savageau, Dewitt, Begelow, & Charney, 1996). The findings of these two studies suggest that there may be socioeconomic differences between parents who seek help from their pediatricians and those who do not.
There are data to suggest that parents want their child’s PCP to discuss their child’s psychosocial issues with them. In the National Survey of Children’s Health (Halfon, Olson, Inkelas, et al., 2002), more than 80% of parents reported that they wished that their child’s physician would discuss psychosocial or family issues with them. However, just because a parent discloses concerns about their child’s mental health does not mean that the physician will necessarily do anything about these concerns (Wildman, Stancin, Golden, & Yerkey, 2004). The process that actually leads to pediatrician identification (PID) of a child’s problems is likely complex, with little current empirical research into the processes that determine who is identified and who is not. PID is most likely influenced by the interaction of factors related to the child (e.g. symptoms, demeanor, school performance), parent (e.g. willingness to speak with physician about problems, parental psychopathology, social resources), and PCP (e.g. access to resources for referral, knowledge of psychological issues) during the child’s visit to their PCP (Wildman & Stancin, 2004). In a broader scope, issues of structure (e.g. accessibility to treatment to parent because of work, whether or not services are available, type of health insurance) and culture (e.g., perceptions about what is problem behavior, perceptions of the field of mental health care, cultural views of seeking help outside of the family) also may play a major role in PID (Stiffman, Pescosolido, & Cabassa, 2004). While all of these factors are potentially important in PID (Eapen & Ghibash, 2004; Owens, et al., 2002), it is important to understand the specific correlates of PID and put these factors together to create an explanatory model of why some children with behavioral and emotional problems are identified while others are not. Based on previous literature
suggesting that assessment of parental variables can be used by PCPs in order to facilitate accurate PID (Yerkey & Wildman, 2004), the focus of this study was to examine the role that characteristics of the parent play in PID.

*Parental Characteristics*

The finding that child symptoms alone (including type and intensity) are not always predictive of PID (Briggs-Gowan, et al., 2000) implies that there are factors outside of the child that have a major role in PID. The average PCP visit lasts only about 11 minutes and, in this time, the PCP must assess the overall health and functioning of the child, as well as address the initial reasons for the visit, and give anticipatory guidance to the family. Since 11 minutes is not long enough for a PCP to get an accurate sample of the child’s behavior, they must rely on information from the parent about the child’s psychological functioning. PCPs tend to ask children questions about how they are feeling somatically, but look primarily to parents for questions about the child’s behavior and emotions (Tates & Meeuwesen, 2000). PCPs pay more attention to parents than children in general and are significantly more sensitive to parents’ reports of child behavior than to child-reports (Costello & Edelbrock, 1985). If PCPs place more weight on information from the parent and use less information from the child, then characteristics of the parent will likely be relevant for understanding variables contributing to PID because they are typically the primary information source used by the PCP. Therefore, this study focused on parental behavioral and emotional variables
because these are likely to be salient to the PCP since they obtain more information from the parent.

Since PCPs pay more attention to information from parents than they do to information from children, it is not surprising that parental disclosure of psychosocial concerns is significantly related to PID (Dulcan et al., 1990). For example, in one community sample, parents who disclosed a concern about their child’s psychosocial functioning were 4 times more likely to have a child who had seen a mental health care professional at 1 year follow-up (Briggs-Gowan, et al., 2000). In another study, examining the relationships between parental distress, child symptoms, and disclosure on PID, the only significant predictor of PID was maternal disclosure of concern (Wildman, Kizilbash, & Smucker, 1999). However, this relationship is by no means a one to one ratio. Although disclosure significantly increases the likelihood of PID, there are still children who are identified without disclosure, and parents who disclose concern, but whose child is not identified by their PCP (Dulcan, et al., 1990). Given that parental disclosure is so closely related to PID and that there is little empirical research investigating the role of parental factors in PID, some of the hypotheses for the present study will be derived from the available literature on parental disclosure and help-seeking. This is not to say that disclosure and PID are the same thing, but, in some cases, previous research on factors related to disclosure are the closest analogs to studies investigating the relationships between these variables and PID. Since disclosure of concern is so closely related to PID, and the parent is usually the person to disclose concern, the present study focused on examining parental factors in relation to PID.
Specifically, this study assessed the possible role of parental affect, parenting style, and parenting efficacy in predicting PID.

Parental affect is one of the few variables related to the parent that has been studied in relationship to PID. However, the findings of this previous research have been mixed. In some studies, likelihood of PID has been linked to higher maternal negative affect (Wildman, et al., 2004) and higher maternal psychopathology (Dulcan, et al., 1990), but in other studies, parental psychopathology has been linked to child pathology, but not PID (Briggs-Gowan, et al., 2000). One shortcoming of these studies, however, is that they have focused exclusively on negative affect, and did not examine the possible role of positive affect in PID. Positive affect and negative affect have been demonstrated to be two orthogonal aspects of mood that are related to behavior in separate and distinct ways (Watson, Clark, & Tellegen, 1988). Previous research suggests that a multidimensional structure of mood, including positive affect, is important for a complete understanding of the way mood influences other variables (Watson & Clark, 1997). However, most studies of mood to date have focused on the role of negative affect, and ignore the possible role of positive affect (Snyder & Lopez, 2007). Positive affect is associated with enthusiasm, activeness, and engagement in one’s life. Positive affect is also associated with higher levels of problem solving skills (Estrada, Isen, & Young, 1994). One way that parents solve problems that they have with their child’s behavior is to seek out help from their pediatrician (Barlow, Wildman, & Stancin, 2005), and as was discussed previously, help-seeking, and specifically maternal disclosure of psychosocial concern, is highly associated with PID (Dulcan, et al., 1990). As such, it is possible that
this actively-engaged problem solving orientation among parents high in positive affect could lead to a higher likelihood of PID for these parents because when they are concerned about their child’s behavior, they may be more likely to actively seek help from outside sources, including their PCP. One strength of this study is that it examines how affect influences PID by focusing on both the positive and negative dimensions, instead of focusing exclusively on pathology.

Parenting discipline style has been clearly linked to development of child and adolescent behavior problems (Alvarez & Ollendick, 2003), such that parents who are very harsh or very permissive with their children are more likely to have children who are behaviorally aggressive (Baumrind, 1968) and anxious (Wolfradt, Hemple, & Miles, 2003). Although it has not been measured in previous studies, it is plausible that parenting style is associated with PID over and above the relationship between parenting style and child behavior. Parents want to discuss issues related to parenting with their child’s pediatrician (Shultz & Vaughn, 1999) and middle-class mothers view information that they receive about parenting from their child’s pediatrician as more important than parenting information that they receive from other sources, such as their own parents and books (Cheng, et al., 1996). If a parent discusses maladaptive parenting strategies during a visit with their child’s physician and the PCP identifies these strategies as maladaptive, then the PCP may be more likely to identify the child as having behavioral problems because of the understood relationship between parenting and behavioral problems. If a PCP witnesses a parent using poor parenting strategies during a visit, then they also may
be more likely to identify the child as having a behavior problem. However, there is no research to date that has examined these relationships.

Parenting self-efficacy has been shown to be related to help-seeking behavior and, as such, it is likely that it is related to PID. Parenting self-efficacy can best be conceptualized as a parent’s beliefs in their own ability to influence their child and their child’s environment in a way that fosters the child’s development and success (Ardelt & Eccles, 2001). Borrowing from the help-seeking literature, previous research has demonstrated that help-seeking and treatment obtainment is associated with lower levels of parenting self-efficacy (Coleman & Karraker, 1998). For example, in a sample of parents from pediatric settings, parents participating in local parenting programs were likely to have a lower sense of parenting competence than parents from a comparison sample that was not participating in parenting programs (Telleen, 1990). Furthermore, in a rural adult sample, treatment-seeking was significantly associated with self-efficacy, such that people with lower self-efficacy were more likely to seek treatment from medical and mental health professionals (Judd, et al., 2006). It is possible that parents who feel they do not have the tools to effectively deal with their child’s behavior problems will be more likely to seek help from outside sources than parents who feel like they can deal with these problems on their own. Parents view their child’s PCP as a source of potential help for their child’s behavior problems (Barlow, et al., 2005), and are more likely to be identified by their PCP if they discuss concerns with their child’s PCP (Lynch, et al., 1997), so parents with low levels of parenting self-efficacy may have a
higher likelihood of PID. However, no research to date has specifically measured the relationship between parenting self-efficacy and PID.

The evidence of the relationship between parent variables and PID has been inconsistent, with some studies demonstrating a relationship between maternal psychopathology and PID (Dulcan et al., 1990), while others have not (Briggs-Gowan et al., 2000; Wildman, et al., 1999). Demographic variables, such as parental race, socioeconomic status, insurance type, child gender, and whether or not the parent is a single parent, have all been assessed in relation to PID, and have all been found to be significantly associated with PID in some studies, but not others (Briggs-Gowan, et al., 2000; Dulcan, et al., 2000; Gardner, et al., 2000; Glied, Hoven, Moore, Garret & Regier, 1997; Horwitz, Leaf, Leventhal, Forsyth, & Speechly, 1992). One possible reason for these discrepant findings is that PID, as a process, is not the same across PCPs and practices, and so, when different practices are sampled, they yield different results. The suggestion that the process of PID varies across PCPs and practices is consistent with a recent study examining the interaction between parent and physician variables which found that using the interaction between physician beliefs about mental health care and family stress resulted in more explained variance in PID than physician or parental variables alone (Brown, Riley, & Wissow, 2007). This study will examine whether there is variability among the relationships between parental variables and PID across different practice sites.

The primary purpose of this study was to examine how behavioral and emotional variables of parents were associated with whether or not their child was identified by
their PCP as having a potential psychosocial problem. The second goal of this study was to explore whether the findings of this study generalize across different practice sites, or whether the sites differ with regard to the relationships between parental variables and PID. Finally, this study sought to add to the literature exploring the possible relationships between demographic variables and PID.

It was hypothesized that variables related to parental behavior and emotions would significantly aid in predicting which children were identified by their PCP over and above the relationships between these variables and child behavior. Specifically, parents with high levels of positive affect were hypothesized to be more likely to have their child identified than parents with low levels of positive affect because parents with high positive affect are more likely to seek help and take an active approach in obtaining treatment for their child’s problems (Estrada, et al., 1994). Parental negative affect was hypothesized to be positively associated with PID because parents with high levels of negative affect have been found to be more likely to disclose information to their child’s PCP about their child’s behavior than parents with low levels of negative affect (Dulcan, et al., 1990). It was also hypothesized that children of parents with a dysfunctional parenting style would be more likely to be identified by their PCP, because parents wish to discuss parenting issues with their PCP (Schultz & Vaughn, 1999), and if they disclose information pertaining to their maladaptive parenting style to their PCP they will be more likely to have their child identified. Parents who have low parenting self-efficacy were hypothesized to be more likely to have their child be identified by their PCP, because parents with low levels of parenting self-efficacy have been shown to be more active
seekers of help from outside sources (Telleen, 1990; Judd et al., 2006). It was also hypothesized that these parental behavioral and emotional variables would add significantly to the prediction of PID over and above demographic control variables and child symptoms. Finally, it was hypothesized that there would be differences between the pediatric practice sites in how parental variables are associated with PID.
METHOD

Procedure

Participants in this study were parents and legal guardians of children scheduled for well child or acute care appointments in 4 community-based primary care pediatric practices, all of which were affiliated with the same regional pediatric hospital in northeastern Ohio. The research project was approved by the Institutional Review Boards of both Kent State University and the hospital system in which data was collected. Parental consent was obtained immediately after parents were approached by trained undergraduate research assistants in the waiting room of their child’s PCP’s office. In order to be eligible to participate, the adult with the child was required to be the parent or legal guardian of the child about whom the parent was completing measures, and this child had to be between the ages of 2 and 16 years old. Physicians gave informed consent before the research project began, and no physicians refused to participate. Parents in the study were approached in the waiting rooms by trained undergraduate research assistants. If the parent consented to participate, they were given all measures except for the Physician Checklist to complete in the waiting room and while in the exam room, waiting for their child’s PCP. If a parent accompanied more than one child for an appointment, the parent was instructed to complete the measures for the child whose birthday was closest to the date of the appointment. A Physician Checklist with the same participant number as the parent measures was attached to the
patient’s chart by the office staff. Physicians completed the Physician Checklist immediately after their visit with the child. Completed Physician Checklists were placed in a tray and were kept separate from the parent measures and consent forms.

A total of 1461 parents consented to participate in the study. From this initial sample, 831 cases were used in the final analysis (432 cases had completed parent measures but lacked Physician Checklists, 79 Physician Checklists were returned without being completed, 46 parents consented but did not complete the parent measures, 22 cases were missing demographic information, 36 cases were missing data for more than half of the parent measures, 11 cases were identified as multivariate outliers, and 4 cases included children older than 16 years old). Descriptive data for participants included in the analyses can be found in Table 1, correlations among the continuous study variables for the overall sample can be found in Table 2, and comparative statistics between identified and non identified cases can be found in Table 3.

Parents included in the analyses ranged in age from 19 to 68 years old (M=34.24, SD=7.46), with children ranging from ages 2-16 years old (M=6.79, SD=3.75). The majority of parents that were included in analyses identified themselves as Caucasian (78.9%), with a sizable minority of African Americans (15.4%) and few who identified themselves as Asian, Hispanic, other, or biracial (.6%, 1.9%, 1.4%, and 1.7%, respectively). Asian, Hispanic, other and biracial groups were collapsed into a group collectively called “other” for final analyses because each group alone was too small to be included in the analyses individually. These categories were collapsed with one another strictly to keep these participants in the sample. It is not assumed that these
<table>
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<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>N</td>
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<td>115</td>
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<td>Parent Age (years)</td>
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<td>34.24(7.46)</td>
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<td>Ethnicity Frequency</td>
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<tr>
<td>Caucasian</td>
<td>566 (79.1%)</td>
<td>90 (78.3%)</td>
<td>656 (78.9%)</td>
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<tr>
<td>African American</td>
<td>108 (15.1%)</td>
<td>20 (17.4%)</td>
<td>128 (15.4%)</td>
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<td>Other Ethnicity</td>
<td>42 (5.9%)</td>
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<td>Child Gender Frequency</td>
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<tr>
<td>Female</td>
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<td>394 (47.4%)</td>
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<td>Male</td>
<td>369 (51.5%)</td>
<td>68 (59.1%)</td>
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<tr>
<td>Single</td>
<td>208 (29.1%)</td>
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<td>259 (31.2%)</td>
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<td>0 (0%)</td>
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<td>341 (49.6%)</td>
<td>75 (65.2%)</td>
<td>416 (50.0%)</td>
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<tr>
<td>Private</td>
<td>348 (48.6%)</td>
<td>36 (31.3%)</td>
<td>384 (46.2%)</td>
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<tr>
<td>Self Pay</td>
<td>14 (2.0%)</td>
<td>3 (2.6%)</td>
<td>17 (2.0%)</td>
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<tr>
<td>No Response</td>
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<td>1 (0.9%)</td>
<td>14 (1.7%)</td>
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<td>12.32(4.44)</td>
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<td>15.03(4.93)</td>
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<td>32.55(4.34)</td>
<td>31.51(5.03)</td>
<td>32.41(4.45)</td>
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Table 2. Correlation Coefficients Among Continuous Study Variables (N=831).

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<td>Child age</td>
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<td>.51**</td>
<td>-.14**</td>
<td>.08*</td>
<td>-.09**</td>
<td>.06</td>
<td>.21**</td>
<td>-.03</td>
<td>-.02</td>
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<td>Parent age</td>
<td>--</td>
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<td>-.05</td>
<td>.12**</td>
<td>.01</td>
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<td>ECBI Intensity</td>
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<td>-.18**</td>
<td>.37**</td>
<td>.30**</td>
<td>.25**</td>
<td>-.34</td>
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<tr>
<td>ECBI Problem</td>
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<td>-.17**</td>
<td>.33**</td>
<td>.25**</td>
<td>.12**</td>
<td>-.26**</td>
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<tr>
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<td>--</td>
<td>-.25**</td>
<td>-.32**</td>
<td>-.30**</td>
<td>.32**</td>
<td></td>
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<td></td>
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<tr>
<td>PANAS NA</td>
<td>--</td>
<td>.35**</td>
<td>.23**</td>
<td>.22**</td>
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<tr>
<td>PS Overreactivity</td>
<td>--</td>
<td>.39**</td>
<td>-.38**</td>
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</tr>
<tr>
<td>PS Laxness</td>
<td>--</td>
<td>-.35**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PSOC Efficacy</td>
<td>--</td>
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*p<.05, **p<.01
Table 3. Descriptive Data Comparing 716 Not Identified and 115 Identified Children

<table>
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<th>Variable</th>
<th>Not Identified</th>
<th>Identified</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) ECBI Intensity</td>
<td>92.1 (28.9)</td>
<td>116.1 (37.4)</td>
<td>t (829)=7.9***</td>
</tr>
<tr>
<td>Mean (SD) ECBI Problem</td>
<td>5.1 (5.8)</td>
<td>10.0 (7.7)</td>
<td>t (829)=8.0***</td>
</tr>
<tr>
<td>% African American</td>
<td>15.1%</td>
<td>17.4%</td>
<td>$\chi^2$ (1)=.4, ns</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>79.1%</td>
<td>78.3%</td>
<td>$\chi^2$ (1)=.1, ns</td>
</tr>
<tr>
<td>% Other ethnicity</td>
<td>5.9%</td>
<td>4.3%</td>
<td>$\chi^2$ (1)=.4, ns</td>
</tr>
<tr>
<td>Mean (SD) parent age</td>
<td>34.1 (7.4)</td>
<td>35.1 (7.7)</td>
<td>t (829)=1.4, ns</td>
</tr>
<tr>
<td>% Female</td>
<td>48.5%</td>
<td>40.9%</td>
<td>$\chi^2$ (1)=2.3, ns</td>
</tr>
<tr>
<td>Mean (SD) child age</td>
<td>6.5 (3.7)</td>
<td>8.9 (3.4)</td>
<td>t(829)=6.7***</td>
</tr>
<tr>
<td>% single parent</td>
<td>29.2%</td>
<td>44.3%</td>
<td>$\chi^2$ (1)=10.6**</td>
</tr>
<tr>
<td>% Private Insurance</td>
<td>49.5%</td>
<td>31.6%</td>
<td>$\chi^2$ (1)=12.7***</td>
</tr>
<tr>
<td>% Medicaid</td>
<td>48.5%</td>
<td>65.8%</td>
<td>$\chi^2$ (1)=11.7**</td>
</tr>
<tr>
<td>% Self pay</td>
<td>2.0%</td>
<td>2.6%</td>
<td>$\chi^2$ (1)=.2, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS PA</td>
<td>35.7 (7.0)</td>
<td>34.1 (8.3)</td>
<td>t(829)=-2.1*</td>
</tr>
<tr>
<td>Mean (SD) PANAS NA</td>
<td>17.2 (5.4)</td>
<td>19.5 (6.6)</td>
<td>t(829)=4.2***</td>
</tr>
<tr>
<td>Mean (SD) PS Overreactivity</td>
<td>14.9 (5.0)</td>
<td>15.6 (4.8)</td>
<td>t(829)=1.3, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Laxness</td>
<td>12.3 (4.2)</td>
<td>12.3 (4.4)</td>
<td>t(829)=-.03, ns</td>
</tr>
<tr>
<td>Mean (SD) PSOC Efficacy</td>
<td>32.6 (4.3)</td>
<td>31.5 (5.0)</td>
<td>t(829)=-2.3*</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
ethnic groups within the “other” category are similar, and no inferences will be made specifically in reference to this group. The percentage of male and female children about whom parents reported was roughly equal (52.6% and 47.4%, respectively).

**Measures**

The *Demographic Questionnaire* was used to obtain information about the parent and child’s age, gender, ethnicity, and education and can be found in Appendix A. In addition, it assesses whether or not the parent is a single parent, and the type of medical insurance coverage that they have. For all analyses, single parent status was coded as ‘1’ if the parent was single and ‘0’ if the parent was not single, child gender was coded as ‘1’ for female children and ‘0’ for male children, and all ethnicity groups and insurance types were dummy coded with ‘1’ for all members of the labeled ethnic group or insurance type and ‘0’ for everyone else.

The *Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999)* is a 36 item parent report of externalizing child behavior problems. Sample Items from the ECBI can be found in Appendix B. Each item describes a problem behavior that the parent rates on a scale of 1-7 of how often the behavior occurs in their child. These scores are then summed to compose the Intensity scale score, which ranges from 36-252, and has a clinical cutoff of 131. For each item, the parent is also asked “Is this a problem for you”, to which they can respond “yes” or “no”. The number of “yes” responses are summed to represent the Problem scale score, which ranges from 0-36, and has a clinical
cutoff of 15. A child who exceeds the cutoffs in both scales is considered to have a clinically significant level of behavior problems.

The ECBI has good construct validity; scores on the ECBI are highly correlated with observational measures of child negative affect, nonacceptance, and dominance (Webster-Stratton & Eyberg, 1982). It also correlates highly with the Child Behavior Checklist (CBCL; Achenbach, 1991) externalizing scale ($r = .67$ Problem scale, $r = .75$ Intensity scale) and internalizing scale ($r = .48$ Problem scale, $r = .41$ Intensity scale).

The ECBI has high discriminant validity, shown by studies in which groups of children with behavior problems had statistically significantly higher Intensity and Problem scale scores than children without behavior problems, and could be differentiated from one another by using the suggested cutoffs (Eyberg & Ross, 1978).

In the ECBI restandardization study (Colvin, Eyberg, & Adams, 1999), the internal consistency for children ages 2-16 years was .95 for the Intensity scale and .93 for the Problem scale, measured using Cronbach’s alpha. The test-retest reliability of the ECBI has been established over short time periods and longer time periods, with test retest correlations of .88 on the Problem scale and .86 on the Intensity scale over a three week period, and .75 for both the Problem and Intensity scale scores over 10 month intervals. Finally, Eyberg and Robinson (1983) obtained interrater reliability coefficients of .86 for the Intensity scale, and .79 for the Problem scale between the parents of conduct disordered children. In the present sample, the Cronbach’s alpha coefficients for the Intensity and Problem scales were .95 and .93, respectively.
The Positive Affect Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) is a 20 item dimensional measure of general trait positive affect (PA) and negative affect (NA). The PANAS can be found in Appendix C. Each item has an adjective describing a feeling or emotion, and the respondent records the extent to which they have felt this way during the past few weeks on a scale of 1 to 5, with 1 indicating that the feeling had not occurred at all, and 5 indicating that it occurred extremely often. The PANAS has ten items for each dimension, with the scores for each item in a scale added together to yield a total score for both the positive and negative affect dimensions ranging from 10-50 for both scales. The scales are highly internally consistent, with Cronbach’s alpha levels of .87 for both dimensions in the standardization sample. The scales are also orthogonal, with an intercorrelation on a non-student sample of -.09, indicating that they tap into two separate constructs. Over an 8 week period, the test-retest reliability was strong for PA \( r = .58 \) and NA \( r = .48 \). The NA scale correlates well with other brief measures of affect, such as the Beck Depression Inventory \( r = .58 \) and the Hopkins Symptoms Checklist \( r = .74 \). Studies examining the external validity of the PANAS found that PA was more highly related to social activity than NA, and that NA was strongly associated with stress, but not PA (Watson, Clark & Tellegen, 1988). In the present sample, the Cronbach’s alpha coefficients for the PA and NA scales were .90 and .84, respectively.

The Parenting Scale (Arnold, O’Leary, Wolff, & Acker, 1993) is a 30 item measure of dysfunctional parenting practices and can be found in Appendix D. Each parent rates, on a scale of 1-7, the intensity with which they participate in particular
behaviors when disciplining their children. Since this measure only examines dysfunctional parenting practices, no measure of authoritative parenting is obtained. The scale originally produced a general scale of dysfunctional disciplining practices along with three subscales: Overreactivity, reflects mistakes related to highly emotional displays of anger, meanness, and irritability, and is somewhat related to the concept of authoritarian parenting; Laxness, which describes ways in which parents give in, allow rules to go unenforced, and reinforce negative behaviors is consistent with theories on permissive parenting; Verbosity, using language excessively in punishment and discipline. A recent factor analysis found support for a shortened version of the Laxness and Overreactivity scales, but not for the inclusion of the verbosity scale using data from the participants in the present study (Karazsia, van Dulmen, & Wildman, 2008). Based on the findings of Karazsia, et al. (2008), and another factor analysis which yielded similar results (Reitman, et al., 2001), the Laxness and Overreactivity scales were used in the current study. The Laxness scale includes 5 items and can range from 5-35 with an alpha of .83. The Overreactivity scale also contains 5 items and can range from 5-35 with an alpha of .82. In the original standardization sample, test-retest reliability over a two-week period with a combined clinic and non-clinic sample yielded correlations of .83 and .82 for Laxness and Overreactivity, respectively (Arnold, et al., 1993). It should be noted, however, that the scales used in the present study are shorter than the versions of the scales used in the original analysis. The samples used to obtain these data were similar to the sample of this study in that they contained parents of children with clinically significant levels of behavior problems, and parents of children without clinical
levels of behavior problems. In the present sample, the Chronbach’s alpha coefficient was .73 for the Overreactivity scale and .71 for the Laxness scale.

The Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989) is a 16 item scale used to assess parental self-efficacy and satisfaction and can be found in Appendix E. The parent is given a statement about their role as a parent, and rates each item on a scale of “1” (strongly agree) to “6” (strongly disagree). The PSOC yields 2 subscales: Efficacy and Satisfaction. Although parents completed the entire measure, the present study only examines parental efficacy; the Satisfaction subscale was not used. The Efficacy subscale is composed of 7 items which assess the degree to which a parent feels skilled and confident in handling their child’s problems. This scale has a range from 7-42, and had an alpha of .76 in the original standardization sample (Johnston & Mash, 1989). The factor structure of the PSOC has been replicated, and the Efficacy scale has been shown to be positively correlated with low-conflict parenting style among mothers in an urban community sample (Ohan, Leung, & Johnston, 2000). In the present sample, the Chronbach’s alpha coefficient for the Efficacy scale was .75.

The Physician’s Checklist is a brief seven-item questionnaire that was developed specifically for this study, but is based on previous research (Yerkey & Wildman, 2004; Lynch, et al., 1997). This measure can be found in Appendix F. It contains information on whether or not the physician has concerns about the psychological functioning of the child, parent, or other family member; whether the child is currently being treated for a psychosocial problem; the nature of the physician’s concerns; and what (if anything) they did about their concerns. Pediatrician identification (PID) was operationally defined as
the PCP reporting concern about the psychosocial functioning of the child, treating the child for a psychosocial problem, or referring the child to mental health services.
RESULTS

Missing Data

Data from 831 participants were included in the final analyses, with 630 participants excluded from analyses for missing the Physician Checklist, having less than 50% of the items in the parenting measures completed, being identified as multivariate outliers, or not meeting inclusion criteria. Separate logistic regressions were conducted to examine patterns in missing data. These analyses included whether participants were included in the final analyses (0=missing, 1=included) as the dependent variable, and demographic characteristics as the independent variable in separate regressions. Descriptive statistics for persons included and excluded from analyses are available in Table 4. The sample sizes in the missing data group do not match up exactly due to missing data on some of the items. Whether data was missing was not statistically significantly accounted for by child age, parent age, insurance type, single parent status, or PID. Ethnicity was statistically significantly related to being included in the final analyses, with African Americans being less likely to be in the final analyses than Caucasians (B=-.455, p=.002). Finally, Table 5 displays the results of chi-square analyses that revealed significant differences in the proportion of missing data by site ($\chi^2(3)=15.36$, p=.002).
Table 4. Demographic Information for Subjects Included and Excluded from Analyses

\( (N=1461) \)

<table>
<thead>
<tr>
<th></th>
<th>Included</th>
<th>Excluded</th>
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<tbody>
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<td>M(SD)</td>
<td>M(SD)</td>
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<tr>
<td>N</td>
<td>831</td>
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</tr>
<tr>
<td>Child Age (years)</td>
<td>6.79(3.75)</td>
<td>6.77(3.97)</td>
</tr>
<tr>
<td>Parent Age (years)</td>
<td>34.24(7.46)</td>
<td>34.65(8.78)</td>
</tr>
<tr>
<td>Ethnicity Frequency</td>
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<tr>
<td>Caucasian</td>
<td>656 (78.9%)</td>
<td>417 (66.2%)</td>
</tr>
<tr>
<td>African American</td>
<td>128 (15.4%)</td>
<td>119 (18.9%)</td>
</tr>
<tr>
<td>Other Ethnicity</td>
<td>47 (5.7%)</td>
<td>38 (6.0%)</td>
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<tr>
<td>No Response</td>
<td>0 (0%)</td>
<td>56 (8.9%)</td>
</tr>
<tr>
<td>Child Gender Frequency</td>
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<tr>
<td>Female</td>
<td>394 (47.4%)</td>
<td>300 (47.6%)</td>
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<tr>
<td>Male</td>
<td>437 (52.6%)</td>
<td>278 (44.1%)</td>
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<td>No Response</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
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<td>Single Parent Status</td>
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<tr>
<td>Single</td>
<td>259 (31.2%)</td>
<td>199 (31.6%)</td>
</tr>
<tr>
<td>Not Single</td>
<td>569 (68.5%)</td>
<td>380 (60.3%)</td>
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<tr>
<td>No Response</td>
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<td>51 (8.1%)</td>
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<td>416 (50.0%)</td>
<td>304 (48.2%)</td>
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<td>Value 2</td>
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<tr>
<td>Private</td>
<td>384 (46.2%)</td>
<td>258 (41.0%)</td>
</tr>
<tr>
<td>Self Pay</td>
<td>17 (2.0%)</td>
<td>8 (1.3%)</td>
</tr>
<tr>
<td>No Response</td>
<td>14 (1.7%)</td>
<td>60 (9.5%)</td>
</tr>
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Table 5. Summary of Chi-square Analysis Comparing Missing and Non-Missing Data by Site (N=1461)

<table>
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<tr>
<th>Site</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
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<tbody>
<tr>
<td>Missing</td>
<td>178</td>
<td>140</td>
<td>187</td>
<td>125</td>
<td>630</td>
</tr>
<tr>
<td>Included</td>
<td>299</td>
<td>202</td>
<td>191</td>
<td>139</td>
<td>831</td>
</tr>
<tr>
<td>Total</td>
<td>477</td>
<td>342</td>
<td>378</td>
<td>264</td>
<td>1461</td>
</tr>
</tbody>
</table>

$\chi^2(3)=15.36, P<.001$
For parental measures included in the final analyses, 81.8% of all possible data points had complete data. In order to include as many participants as possible in the final analyses, missing data on all parenting measures, with the exception of the Demographic Questionnaire, were imputed using an expectation-maximization (EM) imputation algorithm available in EQS 6.1 (Bentler, 2004). This strategy was used because EM imputation yields more accurate standard errors than listwise or pairwise deletion (Bentler, 2004). EM imputation was also suitable for this study because it has been shown in simulation studies to demonstrate less bias than listwise deletion, especially with large sample sizes (n>400) and when less than 20% of data points have missing data, even when data is not missing completely at random (Peng & Zhu, 2008). Finally, this approach to missing data also allowed for increased power for multivariate analyses.

*Control Variables*

For all analyses, the ECBI Intensity scale score was entered as a control variable in order to ensure that any significant associations between the independent variables and PID could not be completely accounted for by their association with child behavior. Although the ECBI Problem and Intensity scale have been shown to be distinct indicators of child behavior problem severity (Eyberg & Pincus, 1999), only the ECBI Intensity scale score was used to control for child behavior in the present study due to a high correlation between the ECBI Problem and Intensity scale (r=.75), which can be problematic for logistic regression.
In order to determine whether or not to include other demographic variables as controls for analyses, t-tests and chi-square analyses were conducted comparing participants who were identified by their PCP to participants who were not identified by their PCP. Specifically, these analyses compared identified on non-identified participants on parent ethnicity, parent age, child gender, child age, whether or not the parent is a single parent, and type of medical insurance. Variables that were statistically significantly different based on group membership were included as control variables in further analyses. The results of these comparisons can be found in Table 3. The children in the identified group were statistically significantly older ($t(829)=6.7$, $p<.001$), were more likely to have a single parent ($\chi^2 (1)=10.6$, $p<.05$), were less likely to have private health insurance ($\chi^2 (1)=12.7$, $p<.001$), and were more likely to have Medicaid health insurance ($\chi^2 (1)=11.7$, $p<.01$) than participants who were in the not identified group. All subsequent logistic regressions control for ECBI Intensity scale score, child age, single parent status, and type of medical insurance.

**PID Analyses**

In order to determine how parental variables are associated with PID, a stepwise logistic regression was conducted, with ECBI Intensity scale score, child age, single parent status, and type of insurance entered at the first step, and parental positive affect, negative affect, overreactivity, laxness, and efficacy (the 5 key parental variables) entered at the second step. These variables were entered simultaneously into one equation because in a given office visit, a pediatrician does not see one aspect of a parent at a time,
but must look at the parent and a child as a whole in a short amount of time. As such, all variables are included in the same equation to be in the context of one another, just as the pediatrician sees these variables in the context of one another during the visit. The results of this regression can be found in Table 6. Parental overreactivity was statistically significantly related to PID, with lower levels of parental overreactivity associated with a higher likelihood of PID ($B=-.075$, $p=.008$). All other parental variables were not significantly predictive of PID.

**Separate Practice Site Analyses**

In order to explore whether or not the overall results apply to each of the different practice sites, separate stepwise logistic regressions were conducted assessing the relationship between the parental independent variables and PID for each practice site. Descriptive information for each practice site is available in Tables 7-10. In order to ensure that any differences in findings between the sites were not due to differences in available demographic information, the same procedure for identifying control variables in the overall sample was utilized for each of the four sites separately. The results of these comparisons can be found in tables 11-14. Although child age was statistically significantly different based on whether the child was identified for all sites, single parent status and type of insurance were statistically significantly different based on group membership for some sites and not others. All other demographic variables were not statistically significantly related to group memberships. In order to keep analyses
Table 6. Summary of Logistic Regression Analysis Predicting PID from Parent Variables for Overall Sample (N=815)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>e^B</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>ECBI Intensity</td>
<td>.027***</td>
<td>.004</td>
<td>1.027</td>
<td>1.019-1.035</td>
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<tr>
<td>Child Age</td>
<td>.236***</td>
<td>.032</td>
<td>1.267</td>
<td>1.189-1.349</td>
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<td>Single Parent Status</td>
<td>.132</td>
<td>.252</td>
<td>1.141</td>
<td>.697-1.869</td>
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<tr>
<td>Medicaid</td>
<td>.500^</td>
<td>.263</td>
<td>1.648</td>
<td>.984-2.759</td>
</tr>
<tr>
<td>Self pay</td>
<td>.110</td>
<td>.739</td>
<td>1.116</td>
<td>.262-4.749</td>
</tr>
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<td>PANAS PA</td>
<td>-.007</td>
<td>.017</td>
<td>.993</td>
<td>.961-1.027</td>
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<tr>
<td>PANAS NA</td>
<td>.026</td>
<td>.020</td>
<td>1.026</td>
<td>.987-1.068</td>
</tr>
<tr>
<td>PS Overreactivity</td>
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<td>.028</td>
<td>.928</td>
<td>.877-.981</td>
</tr>
<tr>
<td>PS Laxness</td>
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<td>.030</td>
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<td>.911-1.024</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
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<td>.028</td>
<td>.987</td>
<td>.935-1.042</td>
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<tr>
<td>Constant</td>
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<tr>
<td><strong>χ²</strong></td>
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<tr>
<td>% Identified</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Single parent Status coded as 1 for single parent and 0 for not single parent.

^p<.07. *p < .05. **p < .01. ***p < .001.
Table 7. Descriptive Statistics for Practice Site A by Identification (n=283)

<table>
<thead>
<tr>
<th>PID Group</th>
<th>Not Identified</th>
<th>Identified</th>
<th>Overall</th>
</tr>
</thead>
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<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>N</td>
<td>257</td>
<td>26</td>
<td>283</td>
</tr>
<tr>
<td>Child Age (years)</td>
<td>6.13(3.48)</td>
<td>8.65(2.83)</td>
<td>6.36(3.50)</td>
</tr>
<tr>
<td>Parent Age (years)</td>
<td>32.37(7.32)</td>
<td>33.35(7.57)</td>
<td>32.47(7.33)</td>
</tr>
<tr>
<td>Ethnicity Frequency</td>
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<td></td>
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<tr>
<td>Caucasian</td>
<td>227 (88.3%)</td>
<td>25 (96.2%)</td>
<td>252 (89.0%)</td>
</tr>
<tr>
<td>African American</td>
<td>20 (7.8%)</td>
<td>1 (3.8%)</td>
<td>21 (7.4%)</td>
</tr>
<tr>
<td>Other Ethnicity</td>
<td>10 (3.9%)</td>
<td>0 (0%)</td>
<td>10 (3.5%)</td>
</tr>
<tr>
<td>Child Gender Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>132 (51.4%)</td>
<td>12 (46.2%)</td>
<td>144 (50.9%)</td>
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<tr>
<td>Male</td>
<td>125 (48.6%)</td>
<td>14 (53.8%)</td>
<td>139 (49.1%)</td>
</tr>
<tr>
<td>Single Parent Status</td>
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<td></td>
</tr>
<tr>
<td>Single</td>
<td>79 (30.7%)</td>
<td>11 (42.3%)</td>
<td>90 (31.8%)</td>
</tr>
<tr>
<td>Not Single</td>
<td>175 (68.1%)</td>
<td>15 (57.7%)</td>
<td>190 (67.1%)</td>
</tr>
<tr>
<td>No Response</td>
<td>3 (1.2%)</td>
<td>0 (0%)</td>
<td>3 (1.0%)</td>
</tr>
<tr>
<td>Medical Insurance Type</td>
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<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>142 (55.3%)</td>
<td>21 (80.8%)</td>
<td>163 (57.6%)</td>
</tr>
<tr>
<td>Private</td>
<td>102 (39.7%)</td>
<td>5 (19.2%)</td>
<td>107 (37.8%)</td>
</tr>
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<td>Self Pay</td>
<td>9 (3.5%)</td>
<td>0 (0%)</td>
<td>9 (3.2%)</td>
</tr>
<tr>
<td>No Response</td>
<td>4 (1.6%)</td>
<td>0 (0%)</td>
<td>4 (1.4%)</td>
</tr>
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<td>Measure</td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 3</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>ECBI Intensity</td>
<td>94.20(29.88)</td>
<td>133.58(34.89)</td>
<td>97.81(32.37)</td>
</tr>
<tr>
<td>ECBI Problem</td>
<td>5.48(6.05)</td>
<td>13.34(7.75)</td>
<td>6.2(6.62)</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>35.75(6.83)</td>
<td>32.21(7.65)</td>
<td>35.42(6.97)</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>17.16(5.63)</td>
<td>21.82(7.88)</td>
<td>17.59(6.01)</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>12.40(4.36)</td>
<td>13.88(4.65)</td>
<td>12.54(4.40)</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>14.41(4.93)</td>
<td>16.41(3.98)</td>
<td>14.59(4.88)</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>32.83(4.30)</td>
<td>29.24(4.94)</td>
<td>35.42(6.97)</td>
</tr>
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</table>
Table 8. Descriptive Statistics for Practice Site B by Identification (n=197)

<table>
<thead>
<tr>
<th>PID Group</th>
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<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>28</td>
<td>197</td>
</tr>
<tr>
<td>Child Age (years)</td>
<td>6.96(3.87)</td>
<td>9.75(3.16)</td>
<td>7.36(3.90)</td>
</tr>
<tr>
<td>Parent Age (years)</td>
<td>36.99(6.83)</td>
<td>37.71(8.20)</td>
<td>37.09(7.02)</td>
</tr>
<tr>
<td>Ethnicity Frequency</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>154 (91.1%)</td>
<td>27 (96.4%)</td>
<td>181 (91.9%)</td>
</tr>
<tr>
<td>African American</td>
<td>2 (1.2%)</td>
<td>1 (3.6%)</td>
<td>3 (1.5%)</td>
</tr>
<tr>
<td>Other Ethnicity</td>
<td>13 (7.7%)</td>
<td>0 (0%)</td>
<td>13 (6.6%)</td>
</tr>
<tr>
<td>Child Gender Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>72 (42.6%)</td>
<td>10 (35.7%)</td>
<td>82 (41.6%)</td>
</tr>
<tr>
<td>Male</td>
<td>97 (57.4%)</td>
<td>18 (64.3%)</td>
<td>115 (58.4%)</td>
</tr>
<tr>
<td>Single Parent Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>20 (11.8%)</td>
<td>10 (64.3%)</td>
<td>30 (15.2%)</td>
</tr>
<tr>
<td>Not Single</td>
<td>149 (88.2%)</td>
<td>18 (35.7%)</td>
<td>167 (84.8%)</td>
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<tr>
<td>No Response</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Medical Insurance Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>46 (27.2%)</td>
<td>15 (53.6%)</td>
<td>61 (31.0%)</td>
</tr>
<tr>
<td>Private</td>
<td>117 (69.2%)</td>
<td>12 (42.9%)</td>
<td>129 (65.5%)</td>
</tr>
<tr>
<td>Self Pay</td>
<td>3 (1.8%)</td>
<td>1 (3.6%)</td>
<td>4 (2.0%)</td>
</tr>
<tr>
<td>No Response</td>
<td>3 (1.8%)</td>
<td>0 (0%)</td>
<td>3 (1.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>ECBI Intensity</td>
<td>90.53(26.58)</td>
<td>109.72(35.59)</td>
<td>93.25(28.73)</td>
</tr>
<tr>
<td>ECBI Problem</td>
<td>4.61(5.20)</td>
<td>9.14(6.40)</td>
<td>5.26(5.60)</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>35.48(6.78)</td>
<td>34.59(8.47)</td>
<td>35.36(7.03)</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>17.30(5.41)</td>
<td>18.30(6.15)</td>
<td>17.45(5.51)</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>12.53(4.15)</td>
<td>11.97(3.71)</td>
<td>12.45(4.08)</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>15.69(4.82)</td>
<td>15.91(5.40)</td>
<td>15.72(4.89)</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>32.12(4.67)</td>
<td>30.18(5.03)</td>
<td>31.84(4.76)</td>
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Table 9. Descriptive Statistics for Practice Site C by Identification (n=208)

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<th>Overall</th>
</tr>
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<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>N</td>
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<td>48</td>
<td>208</td>
</tr>
<tr>
<td>Child Age (years)</td>
<td>6.65(3.88)</td>
<td>8.33(3.70)</td>
<td>7.04(3.89)</td>
</tr>
<tr>
<td>Parent Age (years)</td>
<td>32.09(7.31)</td>
<td>33.81(7.29)</td>
<td>32.49(7.33)</td>
</tr>
<tr>
<td>Ethnicity Frequency</td>
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<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>79 (49.4%)</td>
<td>27 (56.3%)</td>
<td>106 (51.0%)</td>
</tr>
<tr>
<td>African American</td>
<td>66 (41.3%)</td>
<td>17 (35.4%)</td>
<td>83 (39.9%)</td>
</tr>
<tr>
<td>Other Ethnicity</td>
<td>15 (9.4%)</td>
<td>4 (8.3%)</td>
<td>19 (9.1%)</td>
</tr>
<tr>
<td>Child Gender Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>72 (45.0%)</td>
<td>20 (41.7%)</td>
<td>92 (44.2%)</td>
</tr>
<tr>
<td>Male</td>
<td>88 (55.0%)</td>
<td>28 (58.3%)</td>
<td>116 (55.8%)</td>
</tr>
<tr>
<td>Single Parent Status</td>
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<td>Single</td>
<td>85 (53.1%)</td>
<td>25 (52.1%)</td>
<td>110 (52.9%)</td>
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<td>Not Single</td>
<td>75 (46.9%)</td>
<td>23 (47.9%)</td>
<td>98 (47.1%)</td>
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<tr>
<td>No Response</td>
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<td>0 (0%)</td>
<td>0 (0%)</td>
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<tr>
<td>Medical Insurance Type</td>
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<tr>
<td>Medicaid</td>
<td>120 (75.0%)</td>
<td>36 (75.0%)</td>
<td>156 (75.0%)</td>
</tr>
<tr>
<td>Private</td>
<td>36 (22.5%)</td>
<td>10 (20.8%)</td>
<td>46 (22.1%)</td>
</tr>
<tr>
<td>Self Pay</td>
<td>1 (0.6%)</td>
<td>1 (2.1%)</td>
<td>2 (1.0%)</td>
</tr>
<tr>
<td>No Response</td>
<td>3 (1.9%)</td>
<td>1 (2.1%)</td>
<td>4 (1.9%)</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>ECBI Intensity</td>
<td>90.41(30.78)</td>
<td>109.76(38.71)</td>
<td>94.88(33.69)</td>
</tr>
<tr>
<td>ECBI Problem</td>
<td>5.33(6.06)</td>
<td>8.45(7.78)</td>
<td>6.05(6.61)</td>
</tr>
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<td>PANAS PA</td>
<td>34.90(7.73)</td>
<td>34.74(8.04)</td>
<td>34.86(7.78)</td>
</tr>
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<td>PANAS NA</td>
<td>17.28(5.35)</td>
<td>18.59(5.62)</td>
<td>17.58(5.42)</td>
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<tr>
<td>PS Overreactivity</td>
<td>14.91(5.31)</td>
<td>14.58(4.81)</td>
<td>14.83(5.19)</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>32.45(4.37)</td>
<td>33.34(4.73)</td>
<td>32.66(4.46)</td>
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</table>
Table 10. Descriptive Statistics for Practice Site D by Identification (n=143)

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<th>Overall</th>
</tr>
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<td>M(SD)</td>
<td>M(SD)</td>
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<td>N</td>
<td>130</td>
<td>13</td>
<td>143</td>
</tr>
<tr>
<td>Child Age (years)</td>
<td>6.17(3.61)</td>
<td>9.69(3.33)</td>
<td>6.49(3.71)</td>
</tr>
<tr>
<td>Parent Age (years)</td>
<td>36.23(6.77)</td>
<td>37.92(6.78)</td>
<td>36.38(6.77)</td>
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<td>Ethnicity Frequency</td>
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<td>Caucasian</td>
<td>106 (81.5%)</td>
<td>11 (84.6%)</td>
<td>117 (81.8%)</td>
</tr>
<tr>
<td>African American</td>
<td>20 (15.4%)</td>
<td>1 (7.7%)</td>
<td>21 (14.7%)</td>
</tr>
<tr>
<td>Other Ethnicity</td>
<td>4 (3.1%)</td>
<td>1 (7.7%)</td>
<td>5 (3.5%)</td>
</tr>
<tr>
<td>Child Gender Frequency</td>
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</tr>
<tr>
<td>Female</td>
<td>71 (54.6%)</td>
<td>5 (38.5%)</td>
<td>76 (53.1%)</td>
</tr>
<tr>
<td>Male</td>
<td>59 (45.4%)</td>
<td>8 (61.5%)</td>
<td>67 (46.9%)</td>
</tr>
<tr>
<td>Single Parent Status</td>
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<td>Single</td>
<td>24 (18.5%)</td>
<td>5 (61.5%)</td>
<td>29 (20.3%)</td>
</tr>
<tr>
<td>Not Single</td>
<td>106 (81.5%)</td>
<td>8 (38.5%)</td>
<td>114 (79.7%)</td>
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<td>No Response</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Medical Insurance Type</td>
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</tr>
<tr>
<td>Medicaid</td>
<td>33 (25.4%)</td>
<td>3 (23.1%)</td>
<td>36 (25.2%)</td>
</tr>
<tr>
<td>Private</td>
<td>93 (71.5%)</td>
<td>9 (69.2%)</td>
<td>102 (71.3%)</td>
</tr>
<tr>
<td>Self Pay</td>
<td>1 (.8%)</td>
<td>1 (7.7%)</td>
<td>2 (1.4%)</td>
</tr>
<tr>
<td>No Response</td>
<td>3 (2.3%)</td>
<td>0 (0%)</td>
<td>3 (2.1%)</td>
</tr>
<tr>
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<td>Mean1</td>
<td>Mean2</td>
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<td>---------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>ECBI Intensity</td>
<td>92.20</td>
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<td>94.55</td>
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<td>4.85</td>
<td>11.27</td>
<td>5.44</td>
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<tr>
<td>PANAS PA</td>
<td>36.76</td>
<td>34.82</td>
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<tr>
<td>PANAS NA</td>
<td>16.99</td>
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</tr>
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<td>PS Laxness</td>
<td>12.16</td>
<td>12.54</td>
<td>12.20</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>15.07</td>
<td>16.92</td>
<td>15.24</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>32.67</td>
<td>32.17</td>
<td>32.63</td>
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Table 11. Comparisons Between 257 Not Identified and 26 Identified Children for Practice Site A (n=283)

<table>
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<th>Identified</th>
<th>Statistical Test</th>
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<tr>
<td>Mean (SD) ECBI Intensity</td>
<td>94.2 (29.9)</td>
<td>133.6 (34.9)</td>
<td>t (281)=6.3***</td>
</tr>
<tr>
<td>Mean (SD) ECBI Problem</td>
<td>5.5 (6.1)</td>
<td>13.3 (7.8)</td>
<td>t (281)=6.1***</td>
</tr>
<tr>
<td>% African American</td>
<td>7.8%</td>
<td>3.8%</td>
<td>$\chi^2 (1)=.5, \text{ ns}$</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>88.3%</td>
<td>96.2%</td>
<td>$\chi^2 (1)=1.5, \text{ ns}$</td>
</tr>
<tr>
<td>% Other ethnicity</td>
<td>3.9%</td>
<td>0.0%</td>
<td>$\chi^2 (1)=1.0, \text{ ns}$</td>
</tr>
<tr>
<td>Mean (SD) parent age</td>
<td>32.4 (7.3)</td>
<td>33.3 (7.6)</td>
<td>t (281)=.641, \text{ ns}</td>
</tr>
<tr>
<td>% Female</td>
<td>51.4%</td>
<td>46.2%</td>
<td>$\chi^2 (1)=.3, \text{ ns}$</td>
</tr>
<tr>
<td>Mean (SD) child age</td>
<td>6.1 (3.5)</td>
<td>8.7 (2.8)</td>
<td>t(281)=3.6***</td>
</tr>
<tr>
<td>% single parent</td>
<td>31.1%</td>
<td>42.3%</td>
<td>$\chi^2 (1)=1.4$</td>
</tr>
<tr>
<td>% Private Insurance</td>
<td>40.3%</td>
<td>19.2%</td>
<td>$\chi^2 (1)=4.3*$</td>
</tr>
<tr>
<td>% Medicaid</td>
<td>56.1%</td>
<td>80.8%</td>
<td>$\chi^2 (1)=5.9*$</td>
</tr>
<tr>
<td>% Self pay</td>
<td>3.6%</td>
<td>0.0%</td>
<td>$\chi^2 (1)=1.0, \text{ ns}$</td>
</tr>
<tr>
<td>Mean (SD) PANAS PA</td>
<td>35.7 (6.8)</td>
<td>32.2 (7.7)</td>
<td>t(281)=2.5*</td>
</tr>
<tr>
<td>Mean (SD) PANAS NA</td>
<td>17.2 (5.6)</td>
<td>21.8 (7.9)</td>
<td>t(281)=3.9***</td>
</tr>
<tr>
<td>Mean (SD) PS Overreactivity</td>
<td>14.4 (4.9)</td>
<td>16.4 (4.0)</td>
<td>t(281)=2.0*</td>
</tr>
<tr>
<td>Mean (SD) PS Laxness</td>
<td>12.4 (4.4)</td>
<td>13.9 (4.6)</td>
<td>t(281)=1.6, \text{ ns}</td>
</tr>
<tr>
<td>Mean (SD) PSOC Efficacy</td>
<td>32.8 (4.3)</td>
<td>29.2 (4.9)</td>
<td>t(281)=4.0***</td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .01$. *** $p < .001$. 
Table 12. Comparisons Between 169 Not Identified and 28 Identified Children for Practice Site B (n=197)

<table>
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<tr>
<th>Variable</th>
<th>Not Identified</th>
<th>Identified</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) ECBI Intensity</td>
<td>90.5 (26.6)</td>
<td>109.7 (35.6)</td>
<td>t (195)=3.4**</td>
</tr>
<tr>
<td>Mean (SD) ECBI Problem</td>
<td>4.6 (5.2)</td>
<td>9.1 (6.4)</td>
<td>t (195)=4.1***</td>
</tr>
<tr>
<td>% African American</td>
<td>1.2%</td>
<td>3.6%</td>
<td>χ² (1)=.9, ns</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>91.1%</td>
<td>96.4%</td>
<td>χ² (1)=.9, ns</td>
</tr>
<tr>
<td>% Other ethnicity</td>
<td>7.7%</td>
<td>0.0%</td>
<td>χ² (1)=2.3, ns</td>
</tr>
<tr>
<td>Mean (SD) parent age</td>
<td>37.0 (6.8)</td>
<td>37.7 (8.2)</td>
<td>t (195)=.5, ns</td>
</tr>
<tr>
<td>% Female</td>
<td>42.6%</td>
<td>35.7%</td>
<td>χ² (1)=.5, ns</td>
</tr>
<tr>
<td>Mean (SD) child age</td>
<td>6.5 (3.7)</td>
<td>8.9 (3.4)</td>
<td>t(195)=3.6***</td>
</tr>
<tr>
<td>% single parent</td>
<td>11.8%</td>
<td>35.7%</td>
<td>χ² (1)=10.6**</td>
</tr>
<tr>
<td>% Private Insurance</td>
<td>70.5%</td>
<td>42.9%</td>
<td>χ² (1)=8.2**</td>
</tr>
<tr>
<td>% Medicaid</td>
<td>27.7%</td>
<td>53.6%</td>
<td>χ² (1)=7.4**</td>
</tr>
<tr>
<td>% Self pay</td>
<td>1.8%</td>
<td>3.6%</td>
<td>χ² (1)=.4, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS PA</td>
<td>35.5 (6.8)</td>
<td>34.6 (8.5)</td>
<td>t(195)=.6, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS NA</td>
<td>17.3 (5.4)</td>
<td>18.3 (6.1)</td>
<td>t(195)=.9, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Overreactivity</td>
<td>15.7 (4.8)</td>
<td>15.9 (5.4)</td>
<td>t(195)=.2, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Laxness</td>
<td>12.5 (4.1)</td>
<td>12.0 (3.7)</td>
<td>t(195)=.7, ns</td>
</tr>
<tr>
<td>Mean (SD) PSOC Efficacy</td>
<td>32.1 (4.7)</td>
<td>30.2 (5.0)</td>
<td>t(195)=-2.0*</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Table 13. Comparisons Between 160 Not Identified and 48 Identified Children for Practice Site C (n=208)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Not Identified</th>
<th>Identified</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) ECBI Intensity</td>
<td>90.4 (30.8)</td>
<td>109.8 (38.7)</td>
<td>t (206)=3.6***</td>
</tr>
<tr>
<td>Mean (SD) ECBI Problem</td>
<td>5.3 (6.1)</td>
<td>8.4 (7.8)</td>
<td>t (206)=2.9**</td>
</tr>
<tr>
<td>% African American</td>
<td>41.3%</td>
<td>35.4%</td>
<td>χ² (1)=.5, ns</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>49.4%</td>
<td>56.3%</td>
<td>χ² (1)=.7, ns</td>
</tr>
<tr>
<td>% Other ethnicity</td>
<td>9.4%</td>
<td>8.3%</td>
<td>χ² (1)=.1, ns</td>
</tr>
<tr>
<td>Mean (SD) parent age</td>
<td>32.1 (7.3)</td>
<td>33.8 (7.3)</td>
<td>t (206)=1.4, ns</td>
</tr>
<tr>
<td>% Female</td>
<td>45.0%</td>
<td>41.7%</td>
<td>χ² (1)=.2, ns</td>
</tr>
<tr>
<td>Mean (SD) child age</td>
<td>6.7 (3.9)</td>
<td>8.3 (3.7)</td>
<td>t(206)=2.6**</td>
</tr>
<tr>
<td>% single parent</td>
<td>53.1%</td>
<td>52.1%</td>
<td>χ² (1)=.01, ns</td>
</tr>
<tr>
<td>% Private Insurance</td>
<td>22.9%</td>
<td>21.3%</td>
<td>χ² (1)=.06, ns</td>
</tr>
<tr>
<td>% Medicaid</td>
<td>76.4%</td>
<td>76.6%</td>
<td>χ² (1)=.01, ns</td>
</tr>
<tr>
<td>% Self pay</td>
<td>.6%</td>
<td>2.1%</td>
<td>χ² (1)=.8, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS PA</td>
<td>34.9 (7.7)</td>
<td>34.7 (8.0)</td>
<td>t(206)=.1, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS NA</td>
<td>17.3 (5.3)</td>
<td>18.6 (5.6)</td>
<td>t(206)=1.5, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Overreactivity</td>
<td>14.9 (5.3)</td>
<td>14.6 (4.8)</td>
<td>t(206)=.4, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Laxness</td>
<td>12.2 (4.2)</td>
<td>11.6 (4.5)</td>
<td>t(206)=.7, ns</td>
</tr>
<tr>
<td>Mean (SD) PSOC Efficacy</td>
<td>32.5 (4.4)</td>
<td>33.3 (4.7)</td>
<td>t(206)=1.2, ns</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Table 14. Comparisons Between 130 Not Identified and 13 Identified Children for Practice Site D (n=143)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Not Identified</th>
<th>Identified</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) ECBI Intensity</td>
<td>92.2 (27.2)</td>
<td>118.1 (33.3)</td>
<td>t (141)=3.2**</td>
</tr>
<tr>
<td>Mean (SD) ECBI Problem</td>
<td>4.9 (5.8)</td>
<td>11.3 (8.2)</td>
<td>t (141)=3.7***</td>
</tr>
<tr>
<td>% African American</td>
<td>15.4%</td>
<td>7.7%</td>
<td>χ² (1)=.6, ns</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>81.5%</td>
<td>84.6%</td>
<td>χ² (1)=.08, ns</td>
</tr>
<tr>
<td>% Other ethnicity</td>
<td>3.1%</td>
<td>7.7%</td>
<td>χ² (1)=.7, ns</td>
</tr>
<tr>
<td>Mean (SD) parent age</td>
<td>36.2 (6.8)</td>
<td>37.9 (6.8)</td>
<td>t (141)=.9, ns</td>
</tr>
<tr>
<td>% Female</td>
<td>54.6%</td>
<td>38.5%</td>
<td>χ² (1)=1.2, ns</td>
</tr>
<tr>
<td>Mean (SD) child age</td>
<td>6.2 (3.6)</td>
<td>9.7 (3.3)</td>
<td>t(141)=3.4**</td>
</tr>
<tr>
<td>% single parent</td>
<td>18.5%</td>
<td>38.5%</td>
<td>χ² (1)=2.9, ns</td>
</tr>
<tr>
<td>% Private Insurance</td>
<td>73.2%</td>
<td>69.2%</td>
<td>χ² (1)=.1, ns</td>
</tr>
<tr>
<td>% Medicaid</td>
<td>26.0%</td>
<td>23.1%</td>
<td>χ² (1)=.1, ns</td>
</tr>
<tr>
<td>% Self pay</td>
<td>.8%</td>
<td>7.7%</td>
<td>χ² (1)=4.0*</td>
</tr>
<tr>
<td>Mean (SD) PANAS PA</td>
<td>36.2 (6.8)</td>
<td>37.9 (6.8)</td>
<td>t(141)=.9, ns</td>
</tr>
<tr>
<td>Mean (SD) PANAS NA</td>
<td>17.0 (5.1)</td>
<td>21.1 (7.4)</td>
<td>t(141)=2.6*</td>
</tr>
<tr>
<td>Mean (SD) PS Overreactivity</td>
<td>15.1 (4.6)</td>
<td>16.9 (4.7)</td>
<td>t(141)=1.4, ns</td>
</tr>
<tr>
<td>Mean (SD) PS Laxness</td>
<td>12.2 (3.9)</td>
<td>12.5 (5.0)</td>
<td>t(141)=.3, ns</td>
</tr>
<tr>
<td>Mean (SD) PSOC Efficacy</td>
<td>32.7 (3.9)</td>
<td>32.2 (4.0)</td>
<td>t(141)=.4, ns</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
consistent across sites and still control for demographic differences that occur at some sites, each regression controlled for ECBI Intensity scale score, child age, single parent status, and type of medical insurance. It should be noted that, in the logistic regression for practice site A, the beta weights for ‘self pay’ are extremely inflated because all members of the group were in the not identified group at this practice site. Additional exploratory analyses combining the Medicaid and self pay group and rerunning the logistic regressions found that the results were the same in terms of which variables were statistically significant and the direction of relationship between PID and the statistically significant variables.

Logistic regressions were conducted separately for each site, including ECBI Intensity scale score, child age, single parent status, and type of health insurance entered at the first step, and the 5 key parental variables entered at the second step. The results of the stepwise logistic regressions for sites A, B, C, and D can be found in Tables 15-18. Differences in sample size for these analyses are due to missing data for the single parent variable (n=3) and missing data on the insurance variable (n=14). Among the 5 key parent variables for site A (n=283), the only statistically significant predictor of PID was efficacy, with lower levels of parenting efficacy predicting a higher likelihood of PID (B=-.134, p=.041). For site B (n=197), there was a trend towards overreactivity being statistically significantly associated with PID (B=-.127, p=.068), with lower levels of overreactivity predicting a higher likelihood of PID. For site C (n=208), overreactivity (B=-.090, p=.048) was statistically significantly associated with PID, with lower levels of overreactivity predicting a higher likelihood of PID and there was a statistical trend for
Table 15. Summary of Logistic Regression Analysis Predicting PID from Parent Variables for Practice Site A (n=277)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>$e^B$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECBI Intensity</td>
<td>.038***</td>
<td>.009</td>
<td>1.038</td>
<td>1.021-1.056</td>
</tr>
<tr>
<td>Child Age</td>
<td>.353***</td>
<td>.082</td>
<td>1.424</td>
<td>1.213-1.671</td>
</tr>
<tr>
<td>Single Parent Status</td>
<td>-.362</td>
<td>.560</td>
<td>.697</td>
<td>.232-2.088</td>
</tr>
<tr>
<td>Medicaid</td>
<td>.603</td>
<td>.651</td>
<td>1.828</td>
<td>.510-6.544</td>
</tr>
<tr>
<td>Self pay</td>
<td>-18.705</td>
<td>12103.390</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>.008</td>
<td>.043</td>
<td>1.008</td>
<td>.926-1.098</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>.043</td>
<td>.041</td>
<td>1.044</td>
<td>.963-1.132</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>-.054</td>
<td>.063</td>
<td>.948</td>
<td>.838-1.073</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>.043</td>
<td>.061</td>
<td>1.044</td>
<td>.963-1.178</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>-.134*</td>
<td>.066</td>
<td>.875</td>
<td>.769-.995</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.083</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>63.545***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Identified</td>
<td>9.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Single parent Status coded as 1 for single parent and 0 for not single parent.

*p<.07. *p < .05. **p < .01. ***p < .001.
Table 16. Summary of Logistic Regression Analysis Predicting PID from Parent Variables for Practice Site B (n=194)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>$e^B$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECBI Intensity</td>
<td>.034**</td>
<td>.010</td>
<td>1.035</td>
<td>1.014-1.055</td>
</tr>
<tr>
<td>Child Age</td>
<td>.298***</td>
<td>.076</td>
<td>1.348</td>
<td>1.161-1.565</td>
</tr>
<tr>
<td>Single Parent Status</td>
<td>.803</td>
<td>.610</td>
<td>2.233</td>
<td>.676-7.377</td>
</tr>
<tr>
<td>Medicaid</td>
<td>.710</td>
<td>.549</td>
<td>2.033</td>
<td>.693-5.968</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>.012</td>
<td>.039</td>
<td>1.012</td>
<td>.938-1.091</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>-.019</td>
<td>.045</td>
<td>.981</td>
<td>.898-1.073</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>-.127^</td>
<td>.069</td>
<td>.881</td>
<td>.769-1.009</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>-.080</td>
<td>.068</td>
<td>.923</td>
<td>.808-1.055</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>-.106</td>
<td>.062</td>
<td>.900</td>
<td>.797-1.015</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.944</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>42.960***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Identified</td>
<td>14.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Single parent Status coded as 1 for single parent and 0 for not single parent.

^p<.07. *p < .05. **p < .01. ***p < .001.
Table 17. Summary of Logistic Regression Analysis Predicting PID from Parent Variables for Practice Site C (n=140)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>e^B</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECBI Intensity</td>
<td>.027***</td>
<td>.007</td>
<td>1.027</td>
<td>1.014-1.040</td>
</tr>
<tr>
<td>Child Age</td>
<td>.188***</td>
<td>.052</td>
<td>1.207</td>
<td>1.090-1.337</td>
</tr>
<tr>
<td>Single Parent Status</td>
<td>-.130</td>
<td>.394</td>
<td>.878</td>
<td>.406-1.902</td>
</tr>
<tr>
<td>Medicaid</td>
<td>.077</td>
<td>.476</td>
<td>1.080</td>
<td>.425-2.745</td>
</tr>
<tr>
<td>Self pay</td>
<td>1.111</td>
<td>1.537</td>
<td>3.036</td>
<td>.149-61.719</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>-.007</td>
<td>.026</td>
<td>.993</td>
<td>.945-1.044</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>.029</td>
<td>.036</td>
<td>1.029</td>
<td>.959-1.105</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>-.090*</td>
<td>.045</td>
<td>.914</td>
<td>.837-.999</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>-.039</td>
<td>.051</td>
<td>.962</td>
<td>.871-1.063</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>.087^</td>
<td>.048</td>
<td>1.091</td>
<td>.993-1.199</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.634</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 \] = 34.493***

\textit{df} = 10

\% Identified = 23.0

\( ^\wedge p < .07. \) \( *p < .05. \) \( **p < .01. \) \( ***p < .001. \)

\textit{Note:} Single parent Status coded as 1 for \textit{single parent} and 0 for \textit{not single parent}. 
Table 18. Summary of Logistic Regression Analysis Predicting PID from Parent Variables for Practice Site D (n=143)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>$e^B$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECBI Intensity</td>
<td>.031*</td>
<td>.013</td>
<td>1.031</td>
<td>1.006-1.057</td>
</tr>
<tr>
<td>Child Age</td>
<td>.249**</td>
<td>.095</td>
<td>1.282</td>
<td>1.065-1.544</td>
</tr>
<tr>
<td>Single Parent Status</td>
<td>1.164</td>
<td>.861</td>
<td>3.204</td>
<td>.593-17.306</td>
</tr>
<tr>
<td>Medicaid</td>
<td>-.956</td>
<td>1.003</td>
<td>.384</td>
<td>.054-2.745</td>
</tr>
<tr>
<td>Self pay</td>
<td>1.930</td>
<td>3.128</td>
<td>6.887</td>
<td>.015-3166.061</td>
</tr>
<tr>
<td>PANAS PA</td>
<td>-.007</td>
<td>.053</td>
<td>.993</td>
<td>.894-1.102</td>
</tr>
<tr>
<td>PANAS NA</td>
<td>.036</td>
<td>.071</td>
<td>1.037</td>
<td>.902-1.191</td>
</tr>
<tr>
<td>PS Overreactivity</td>
<td>-.006</td>
<td>.096</td>
<td>.994</td>
<td>.824-1.199</td>
</tr>
<tr>
<td>PS Laxness</td>
<td>-.081</td>
<td>.109</td>
<td>.922</td>
<td>.745-1.141</td>
</tr>
<tr>
<td>PSOC Efficacy</td>
<td>.115</td>
<td>.113</td>
<td>1.122</td>
<td>.899-1.401</td>
</tr>
<tr>
<td>Constant</td>
<td>-10.571</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2$                     | 23.323** |       |        |              |

$df$                        | 10      |       |        |              |

% Identified                | 9.3     |       |        |              |

Note: Single parent Status coded as 1 for single parent and 0 for not single parent.

*p<.07. *p < .05. **p < .01. ***p < .001.
parenting self-efficacy (B=.087, p=.070) with higher levels of parenting self-efficacy predicting a higher likelihood of PID. It should be noted that the direction of the relationship between efficacy and PID in site C is in the exact opposite direction for site A. For site D (n=143), none of the key parental variables were statistically significantly associated with PID.

Because the sites have different sample sizes, power could influence the divergent findings between sites, given the number of independent variables and the type of analyses conducted. However, power differences cannot completely account for the divergent findings. For example, although site A had more power than the other sites because it had the largest sample size, overreactivity was still not found to be a significant predictor of PID at site A, even though it was a predictor at sites B and C. Since site A had a large sample size, it should have been sufficient to detect a predictor that was significant at site C, yet overreactivity was still not found to be a significant predictor at site A. This finding suggests that at different sites, different variables may be more or less important and these differences cannot be better accounted for by the demographic variables (child age, parent age, ethnicity, insurance status, and single parent status) assessed in this study.
DISCUSSION

The findings of the present study suggest that parental behavioral and emotional variables can aid in prediction of whether or not a child is identified by their pediatrician as having a potential psychosocial problem. These findings extend the previous literature on PID, which has typically only examined parental depressive symptoms or demographic variables as possible parental predictors of PID (Briggs Gowan, et al., 2000; Yerkey & Wildman, 2004), and suggests that other parental variables, including parenting self-efficacy and parenting practices, are significant predictors of PID. The findings of this study also demonstrate that what may be important in the prediction of PID for one PCP or group of PCPs, may not be useful in predicting PID with another PCP or group of PCPs. This finding is in contradiction of an underlying assumption of most PID research to date; namely that PID has been examined as a process that is similar across physicians and practices. These findings point towards a new model of research in PID, in which interactions among characteristics of child, parent, physician, and practice variables are utilized to enhance the understanding of variables related to PID.

The primary goal of the present study was to assess whether specific parental behavioral and emotional variables could predict which children are and are not identified by their pediatrician as having a possible psychosocial problem. Given the findings of this study, it is clear that the inclusion of parental variables aids in the prediction of who is identified and who is not. This study was the first to date to examine the role of
parenting self-efficacy, parenting style, and positive affect for understanding PID. While the authors of previous studies have suggested that parents play an important role in PID (Wildman & Stancin, 2004; Yerkey & Wildman, 2004), most studies that have included parental variables have focused on parental psychopathology and demographic factors as predictors of PID. In the present study, it was found that the inclusion of parental behavioral and emotional variables led to a significant increase in the ability to predict PID. Specifically, overreactive parenting style was a significant predictor of who was identified in the overall sample, with higher levels of overreactivity associated with a lower likelihood of PID.

The finding that overreactivity significantly predicted which children were identified by their PCP was surprising given that it was in the opposite direction of what was hypothesized. Initially, it was hypothesized that since parents often wish to discuss parenting issues with their child’s PCP (Shultz & Vaughn, 1999; Barlow, Wildman et al., 2005) and view the information that they receive from their child’s PCP as important (Cheng, et al., 1996), parents with maladaptive parenting strategies may be more likely to be identified because the PCP might be likely to recognize problematic parenting strategies. However, in the present sample, the opposite was true. These findings have applied implications. The more overreactive parenting style that a parent has, the more likely they are to have a child with both externalizing and internalizing problems (Karazsia, et al., 2008; Wolfradt, et al., 2003). Therefore, in the present sample, the children who are at an increased risk of developing externalizing problems based on parenting style were actually less likely to be identified by their PCP. This finding
supports that the inclusion of parent-focused variables is important in PID research.

Since parents with an overreactive parenting style have children who are at greater risk for developing psychosocial issues, an active effort may be needed in order to identify these children before they develop problems or have current problems that become more severe. Previous research has demonstrated that the use of screening devices such as the Pediatric Symptom Checklist in the waiting rooms of primary care practices increases positive identification rate and can be easy to administer (Murphy, Arnett, Bishop, Jellinek, & Reid, 1992). Perhaps using a screening device assessing parenting practices would also aid physicians in identifying these at-risk children that may have been previously difficult to detect. If the PCP did not want to use a screening instrument, it is possible that questions from the PCP directly to the parent that probe about how they react when they are frustrated with their child and what types of consequences they give could also aid in increasing identification among overreactive parents. Even if the child’s behavior had not yet become a problem, this type of screening process would aid in detecting children whose parents have a parenting style that puts them at risk for future psychosocial problems. When identified early, minor externalizing behavior problems are more amenable to treatment (Webster-Stratton & Reid, 2003) and could lead to the prevention of future behavior problems.

In addition to supporting the inclusion of parental variables in the study of PID, the results of the present study also suggest that the variables related to PID are more complex than just child, parent, physician and practice variables as main effects, but that interactions among these factors may provide a better understanding of the process of
PID. For example, at one site, the relationship between PID and parenting self-efficacy was significant in the direction that was originally hypothesized. Specifically, as parenting self-efficacy decreased, the likelihood of PID increased. However at another site, the relationship between parenting self-efficacy and PID was in the exact opposite direction, with increases in parenting self-efficacy associated with a higher likelihood of self-efficacy. These differing findings are difficult to reconcile, given that this is the first study to assess the relationship between PID and parenting self-efficacy. Given the relative paucity of empirical data examining the relationship between PID and parenting self-efficacy, one possible explanation of these findings may come from the general health care utilization literature. In a study by Janicke and Finney (2003), parental stress moderated the relationship between self-efficacy and health care utilization, such that for parents with a low number of life stressors, efficacy did not impact utilization, whereas for parents with a high number of life stressors, efficacy was positively correlated with health care utilization. In the present study, the site with a positive association between parenting self-efficacy and PID had the highest rate of patients with Medicaid health insurance, and were therefore more likely to be exposed to more life stressors than the people at sites with lower rates of Medicaid health insurance, because people on Medicaid generally have lower socioeconomic status than privately insured people (Dodge, Pettit, & Bates, 1994). If the findings from the health care utilization field (Janicke & Finney, 2003) apply to PID, then the likelihood of increased stressors among families living in poverty might explain why there was a positive association between PID and efficacy at one site and not the others. However, it should be emphasized that
parental stress was not directly measured in this study, and future research should examine this proposition directly.

The finding that the relationship between parenting self-efficacy and PID differed across sites is just one demonstration of how associations between PID and the parent variables were different by site in this study, further supporting the need of an interaction model of PID. Although child age was the only variable that was significantly predictive of PID across all practice sites, 3 different practice sites had at least 1 statistically significant parent-related predictor of PID, but no 2 practice sites exhibited the exact same pattern. The differences in significant findings between the practice sites cannot be explained by differences in demographic variables such as parent age, ethnicity, child gender, or single parenthood because none of these variables were significantly associated with PID for the overall sample or at the specific practice sites. These relationships can also not be explained by differences in child age and child behavior, because both of these variables were used as control variables in all analyses.

These differences between the various practices support the contention that the process of PID is not the same across practices. An accurate understanding of PID will not come from a “one size fits all” approach, but rather is likely to require a model that emphasizes interactions among parent variables, but also the various interactions between child, parent, PCP, and structural variables. In this sample, it is possible that differences between practice sites are accounted for by individual differences in the PCPs that work there, or even an office culture based on the group of physicians who work there or the resources available. This contention is consistent with previous research addressing
physician change, which has demonstrated that different physicians (Berwick, 2003) and practices can have different cultures, which lead some to practices to adopt change quickly and readily, while others do not (Collins, Hawks, & Davis, 2000). Given that previous research has demonstrated that there is considerable variability in the type of health care received at different primary care practices, even when these practices are under the umbrella of the same larger hospital system (Litaker, Tomolo, Liberatore, Stange, & Aron, 2006) a plausible explanation of the findings of the current study is that the process of PID varies by practice culture, or by physician beliefs. This explanation would explain why different variables appear to be of different importance to different physicians or different practices and is consistent with a recent study of the relationship between PID and multiple levels of influence (Brown, et al., 2007). In their sample of 828 families seen by 54 PCPs, Brown, et al. (2007) found that the inclusion of an interaction between physician beliefs and family stress led to a significant increase in the amount of explained variance in PID over and above physician, parent, and child variables alone. These findings, coupled with the findings from the present study strongly support the inclusion of interactions of variables at different levels. Although the available models of PID suggest looking at interactions among these variables (Wildman & Stancin, 2004; Stiffman, et al., 2004), the vast majority of studies of PID, including this one, only examine which child/parent/PCP/structural variables are predictive of PID as main effects, but not how variables at these levels interact with one another. Unfortunately, this study did not examine specific variables related to the different physicians and practices, and therefore is unable to provide information on what
variables may interact. However, the findings of this study do point to a need to shift the focus of future PID research from simply examining which factors are important in predicting PID, to which parental variables are predictive of PID for which children seen by which PCPs in what type of practice climate. Though this type of analysis is more complex, it is also likely to lead to a more accurate description of how PID works, and lead to better targeted interventions for increasing PID.

There are several limitations to the conclusions that can be drawn from this study. This project did not collect data specifically about the physicians who filled out the Physician Checklists or the practices that they work in. Although the findings of differences in site are potentially due to differences in physician and practice characteristics, there was no way to directly assess potentially relevant variables. As such, it is possible that differences between the practice sites were due to differences in an unmeasured demographic variable or variables that have nothing to do with the PCP or practice. Future research which includes information at the level of the parent, physician, and practice is necessary in order to address this concern. Another limitation of the present study is that there was a high rate of missing data for the Physician Checklist. It is therefore possible that the sample is biased towards certain types of physicians, and may over or underrepresent the true level of PID and the relationships among the predictor variables and PID. Since physicians were not identified on any of the forms in this study, it is also impossible to assess whether certain physicians had more missing data than others. Although parent ethnicity was not a significant predictor of PID, this sample was more than 75% Caucasian, and African American parents were more likely to
have missing data than Caucasian parents. Therefore it is possible that the results of this study apply to Caucasian parents but do not generalize to ethnic minority parents. Because of sample size limitations, analyses of ethnic differences were not conducted in the present study. Finally, the measure of child behavior used for this study, the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999) measures only externalizing behavior problems, and not internalizing behavior problems. Though internalizing and externalizing behaviors are highly correlated, the data were not controlled for internalizing problems, and it is possible that for some relationships, the relationship between the parental variables and PID was actually mediated by child internalizing problems.

In conclusion, the present study sought to describe the relationship between parent behavioral and emotional variables and pediatrician identification of child psychosocial problems. The findings suggest that the inclusion of these types of variables, specifically, parenting self-efficacy and parenting practices, can be useful in predicting PID. The relationships among these variables differed by practice site, however, suggesting that the process of PID is not a construct that operates the same way universally. In order to obtain the most accurate understanding of PID, future research should assess how physician and practice variables influence the relationship between parent and child variables and PID.
REFERENCES


APPENDIX A

Demographic Information

Your child’s age ______ Your child’s grade in school ______

Your child’s gender (circle one): Female Male

Your age ______

How would you describe your racial or ethnic background? (Please check all that apply)

☐ African American ☐ Asian
☐ Caucasian ☐ Hispanic
☐ Other (please specify) _______________________

Are you a single parent? ☐ Yes ☐ No

What is the highest level of education that you have completed?

☐ Some High School ☐ High School or GED
☐ Some College or Professional School ☐ Bachelor, Associates, or Professional Degree
☐ Some Graduate School ☐ Graduate or Advanced Degree

What is your type of medical insurance coverage?

☐ Medicaid ☐ Medicaid-HMO
☐ Private Insurance ☐ Self Pay
APPENDIX B

Eyberg Child Behavior Inventory

Below are some sample items from the Eyberg Child Behavior Inventory. There are 36 items in total. The full instrument is available from:

Psychological Assessment Resources, Inc
PO Box 998
Odessa, FL 33556

<table>
<thead>
<tr>
<th>HOW OFTEN DOES THIS OCCUR WITH YOUR CHILD?</th>
<th>IS THIS A PROBLEM FOR YOU?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Seldom</td>
</tr>
</tbody>
</table>

9. Refuses to obey until threatened with punishment

13. Has temper tantrums

15. Whines

19. Destroys toys and other objects

23. Teases or provokes other children

28. Constantly seeks attention
APPENDIX C

Positive Affect Negative Affect Schedule

This scale consists of a number of words that describe different feelings and emotions. Reach each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the past few weeks. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th>Item</th>
<th>1 Very Slightly or not at all</th>
<th>2 A little</th>
<th>3 Moderately</th>
<th>4 Quite a bit</th>
<th>5 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. interested</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. alert</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. excited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. ashamed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. inspired</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. strong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. determined</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. scared</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. attentive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. enthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. active</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. proud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX D

Parenting Scale

At one time or another, all children misbehave or do things that could be harmful, that are ‘wrong’, or that parents don’t like. Examples include:

<table>
<thead>
<tr>
<th>Misbehavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>hitting someone</td>
</tr>
<tr>
<td>forgetting homework</td>
</tr>
<tr>
<td>having a tantrum</td>
</tr>
<tr>
<td>running into the street</td>
</tr>
<tr>
<td>whining</td>
</tr>
<tr>
<td>throwing food</td>
</tr>
<tr>
<td>lying</td>
</tr>
<tr>
<td>arguing back</td>
</tr>
<tr>
<td>not picking up toys</td>
</tr>
<tr>
<td>refusing to go to bed</td>
</tr>
<tr>
<td>wanting a cookie before dinner</td>
</tr>
<tr>
<td>coming home late</td>
</tr>
</tbody>
</table>

Parents have many different ways or styles of dealing with these types of problems. Below are items that describe some styles of parenting. For each item, circle the number that best describes your style of parenting **during the past two months** with the child for whom you seek services.

1. When my child misbehaves…
   - 1 2 I do something right away
   - 3 4 I do something about it later

2. Before I do something about a problem…
   - 1 2 I do something right away
   - 3 4 I use only one reminder or warning

3. When I’m upset or under stress…
   - 1 2 I am picky and On my child’s back
   - 3 4 I am no more picky than usual

4. When I tell my child not to do something…
   - 1 2 I say very little
   - 3 4 I say a lot

5. When my child pesters me…
   - 1 2 I can ignore the pestering
   - 3 4 I can’t ignore the pestering
6. When my child misbehaves…
   1 2 3 4 5 6 7
   I usually get into a very long argument with my child
   I don’t get into an argument

7. I threaten to do things that…
   1 2 3 4 5 6 7
   I am sure I can carry out
   I know I won’t actually do

8. I am the kind of parent that…
   1 2 3 4 5 6 7
   Sets limits on what my child is allowed to do
   Lets my child do whatever he/she wants

9. When my child misbehaves…
   1 2 3 4 5 6 7
   I give my child a long lecture
   I keep my talks short and to the point

10. When my child misbehaves…
    1 2 3 4 5 6 7
    I raise my voice or yell
    I speak to my child calmly

11. If saying “No” doesn’t work right away…
    1 2 3 4 5 6 7
    I take some other kind of action
    I keep talking and try to get through to my child

12. When I want my child to stop doing something…
    1 2 3 4 5 6 7
    I firmly tell my child to stop
    I coax or beg my child to stop

13. When my child is out of sight…
    1 2 3 4 5 6 7
    I often don’t know what my child is doing
    I always have a good idea of what my child is doing

14. After there’s been a problem with my child…
    1 2 3 4 5 6 7
    I often hold a grudge
    things get back to normal quickly
15. When we’re not at home…

<table>
<thead>
<tr>
<th></th>
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<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I handle my child the way I do at home</td>
<td>I let my child get away with more</td>
<td></td>
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</table>

16. When my child does something I don’t like…

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<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>I do something about it every time it happens</td>
<td>I often let it go</td>
<td></td>
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</table>

17. When there is a problem with my child…

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<tbody>
<tr>
<td></td>
<td>things build up and I do things I don’t mean</td>
<td>things don’t get out of hand</td>
<td></td>
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</table>

18. When my child misbehaves, I spank, slap, grab or hit my child…

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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>never or rarely</td>
<td>most of the time</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

19. When my child doesn’t do what I ask…

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<tr>
<th></th>
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<th>4</th>
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<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I often let it go or end up doing it myself</td>
<td>I take some other action</td>
<td></td>
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</tbody>
</table>

20. When I give a fair threat or warning…

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<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I often don’t carry it out</td>
<td>I always do what I said</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

21. If saying “No” doesn’t work…

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
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<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I take some other kind of action</td>
<td>I offer my child something nice so that he/she will be nice</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

22. When my child misbehaves…

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I handle it without getting upset</td>
<td>I get so frustrated or angry that my child can see I’m upset</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

23. When my child misbehaves…

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I make my child tell me why he/she did it</td>
<td>I say ‘No’ or take some other action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
24. If my child misbehaves and then acts sorry…
   1  2  3  4  5  6  7
   I handle the problem like I usually would
   I let it go that time

25. When my child misbehaves…
   1  2  3  4  5  6  7
   I rarely use bad language or curse
   I almost always use bad language

26. When I say my child can’t do something…
   1  2  3  4  5  6  7
   I let my child do it anyway
   I stick to what I said

27. When my child misbehaves…
   1  2  3  4  5  6  7
   I make my child tell me why he/she did it
   I say ‘No’ or take some other action

28. When my child does something I don’t like, I insult my child, say mean things, or call my child names…
   1  2  3  4  5  6  7
   Never or rarely
   Most of the time

29. If my child talks back or complains when I handle a problem…
   1  2  3  4  5  6  7
   I ignore the complaining and stick to what I said
   I give my child a talk about not complaining

30. If my child gets upset when I say “No”…
   1  2  3  4  5  6  7
   I back down and give in to my child
   I stick to what I said
APPENDIX E

Parent Sense of Competence Scale

On this questionnaire are 16 items relating your feelings about being a parent. Please read each item carefully and rate whether you feel it applies to you by circling a number from 1 (strongly agree) to 6 (strongly disagree on the scale).

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.

   1  2  3  4  5  6
   strongly agree          strongly disagree

2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.

   1  2  3  4  5  6
   strongly agree          strongly disagree

3. I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot.

   1  2  3  4  5  6
   strongly agree          strongly disagree

4. I do not know why it is, but sometimes when I’m supposed to be in control, I feel more like the one being manipulated.

   1  2  3  4  5  6
   strongly agree          strongly disagree

5. My mother/father was better prepared to be a good mother/father than I am.

   1  2  3  4  5  6
   strongly agree          strongly disagree

6. I would make a fine model for a new mother/father to follow in order to learn what she/he would need to know in order to be a good parent.

   1  2  3  4  5  6
   strongly agree          strongly disagree
7. Being a parent is manageable and many problems are easily solved.

1 2 3 4 5 6
strongly agree strongly disagree

8. A difficult problem in being a parent is not knowing whether you’re doing a good job or a bad one.

1 2 3 4 5 6
strongly agree strongly disagree

9. Sometimes I feel like I’m not getting anything done.

1 2 3 4 5 6
strongly agree strongly disagree

10. I meet my own personal expectations for expertise in caring for my child.

1 2 3 4 5 6
strongly agree strongly disagree

11. If anyone can find the answer to what is troubling my child, I am the one.

1 2 3 4 5 6
strongly agree strongly disagree

12. My talents and interests are in other areas, not in being a parent.

1 2 3 4 5 6
strongly agree strongly disagree

13. Considering how long I’ve been a mother/father, I feel thoroughly familiar with this role.

1 2 3 4 5 6
strongly agree strongly disagree

14. If being a mother/father were only more interesting, I would be motivated to do a better job as a parent.

1 2 3 4 5 6
strongly agree strongly disagree

15. I honestly believe that I have all the skills necessary to be a good mother/father to my child.

1 2 3 4 5 6
strongly agree strongly disagree
16. Being a parent makes me tense and anxious.

1 2 3 4 5 6
strongly agree strongly disagree
APPENDIX F

Physician Checklist

1. Do you have concerns about the psychosocial functioning of (check all that apply):
   ___ Child    ___ Mother    ___ other family member

2. Is this child currently being treated for a psychosocial problem (e.g., ADHD, depression, anxiety), either by you or a colleague? ___ Yes ___ No
   If yes,
   Is the child receiving psychotropic medication (e.g., Ritalin, Adderall, Paxil)?
   ___ Yes ___ No
   Is the child receiving counseling? ___ Yes ___ No

3. Was the PRIMARY purpose of today’s visit the assessment or treatment of a psychosocial problem? ___ Yes ___ No

IF YOU HAVE NO CONCERNS ABOUT CHILD’S PSYCHOSOCIAL FUNCTIONING, STOP HERE

4. Please indicate the nature of your concerns (check all that apply):
   ___ Developmental delay    ___ Feeding, eating, or elimination    ___ Substance use
   ___ Impulsive/hyperactive, inattentive    ___ Somatic and sleep behaviors
   ___ Oppositional/antisocial    ___ Illness related behaviors
   ___ Emotions and moods    ___ Atypical/bizarre behaviors

5. I have concerns that this child’s problem affects (check all that apply):
   ___ Social/interpersonal interactions    ___ Learning and/or development    ___ General health/safety

6. Rate the severity of this problem: ___ Minimal ___ Moderate ___ Severe

7. What did you do about the psychosocial concerns at this visit? (Check all that apply)
   ___ No action taken
   ___ No management needed
   ___ Plan to continue monitoring symptoms
   ___ Scheduled follow-up appointment with me or my associate
   ___ Gave direct advice
   ___ Provided reassurance and support
   ___ Referred for Triple P services
   ___ Referred to mental health professional or social service agency
   ___ Referred to other medical specialist
   ___ Gave prescription or managed current medication
   ___ If a new medication was prescribed, what medication did you prescribe?

_____________________

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