Are Fathers Involved in Pediatric Psychology Research and Treatment?

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Background  Recently, there has been a growing awareness of the importance of the roles of fathers in understanding normative developmental processes. Increased attention has been given to the roles of fathers in the area of clinical child research and therapy. However, the presence of fathers in research and treatment in pediatric psychology has not been fully examined.  Objective  To explore the status of including fathers in both research and treatment in the area of pediatric psychology.  Method  An extensive review of published research.  Results  The findings suggest that pediatric psychology research lags even farther behind clinical child research in including fathers in research designs and analyzing for maternal and paternal effects separately. There is also a concomitant lack of inclusion of fathers in family-based interventions in pediatric psychology.  Conclusion  These patterns are discussed, with an emphasis on strategies to increase the inclusion of fathers in research and treatment of pediatric psychology issues. Future directions for researchers and clinicians are also included.

Key words  fathers; mothers; family research; treatment.

Historically, fathers have not been included in research on normative developmental processes or in research and treatment of developmental psychopathology. Since the mid-1960s, this pattern has improved for research on normative developmental processes with somewhat greater attention to the roles of fathers in children’s development (Biller, 1971; Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Day & Lamb, 2004; Lamb, 1976, 1981, 1997, 2004; Nash, 1965; Parke, 1996; Pruett, 1998), but there continues to be a dearth of studies on the roles of fathers in children’s abnormal development [Phares, Fields, Kamboukos, & Lopez, 2005]. This study explores whether there has been adequate attention to the roles of fathers in pediatric psychology research and treatment.

Who are Fathers?

Phares (1996b) noted the irony of commonly being asked to define “father” in her research writing and presentations, although never being asked to define “mother.” It appears that the role of the mother is assumed to be filled by the primary caretaking biological mother for most children, whereas the role of the father might be filled by any number of male individuals, such as the biological father (who may or may not live with the child), the stepfather (who may or may not live with the child), or a father-figure (such as the mother’s boyfriend, an uncle, or a grandfather—any of whom may or may not live with the child). Thus, the question is a legitimate one, but it also conveys a lack of consensus about how to define fathers currently. For the purposes of this article, a father is defined as the male who is considered a parent, regardless of whether or not there are biological connections.

Currently, the majority of children under the age of 18 in the United States live with both of their biological parents (Hofferth, Stueve, Pleck, Bianchi, & Sayer, 2002). Overall, a total of 64% of children live with both biological parents, 7% live with a biological parent and a
stepparent, 23% live with their single biological mother, 2% live with their single biological father, and 4% live with neither of their biological parents (Hofferth et al., 2002). These figures vary by race or ethnicity, with a larger percentage of Caucasian children living with both of their biological parents (72%, compared with 63% of Hispanic or Latino or Latina children and 32% of African American children) and a larger percentage of African American children living with their single biological mother (53%, compared with 26% of Hispanic or Latino or Latina children and 16% of Caucasian children). Thus, the overall pattern of family demographics suggests that the majority of children (especially those from Caucasian and Hispanic or Latino or Latina backgrounds) reside with both their biological mother and their biological father (Hofferth et al., 2002).

When children do not live with their biological father, a large percentage of them have at least some contact with him. Based on a national survey, a total of 72% of children who did not live with their biological father had at least yearly contact with him (Hofferth et al., 2002). Of the children with at least yearly contact, 68% saw their father at least once a month or more. This pattern is consistent with studies of children whose family receives public assistance (Greene & Moore, 2000). Children who live with their biological mother and stepfather are less likely to have sustained contact with their biological father than are children who live with their single biological mother (Hofferth et al., 2002).

Family demographic data suggest that fathers (whether biological or not) are present in children’s lives to some extent, regardless of their living situations. Even when fathers do not have extensive contact with their offspring, it appears that they can and do influence children’s functioning (Greene & Moore, 2000). Given that fathers remain present in children’s lives, the next question relates to whether fathers have an influence on their children within the normal developmental as well as abnormal developmental processes.

### Are Fathers Important?

When fathers have been investigated in relation to developmental research, interesting patterns emerge. Fathers have been found to influence children in nearly every characteristic studied, including social development, intellectual functioning, academic achievement, language development, cognitive development, and physical health (reviewed in Lamb, 2004; Tamis-LeMonda & Cabrera, 2002). Both similarities and differences have been found in maternal and paternal influences on children’s normative functioning (Lamb, 2004; Tamis-LeMonda & Cabrera, 2002).

Similarities as well as differences between the roles of mothers and fathers have also been found within the realm of abnormal child development. Both maternal and paternal psychopathology serve as risk factors for the development of children’s and adolescents’ emotional and behavioral problems (Connell & Goodman, 2002; Phares, 1996b, 1999; Phares & Compas, 1992). Children’s externalizing behavior problems appear to be linked in comparable ways to mothers’ and fathers’ psychopathology, whereas children’s internalizing problems appear to be linked more closely to maternal psychopathology than to paternal psychopathology (Connell & Goodman, 2002). Overall, these reviews have suggested that fathers as well as mothers play important roles in the emotional and behavioral functioning of their children.

Given that fathers’ characteristics are associated with children’s characteristics in both normal and abnormal development and that both mothers and fathers can provide meaningful information about child functioning, the next logical question is whether developmental researchers and clinical child researchers include fathers in their studies of children’s functioning.

### Are Fathers Included in Developmental and Clinical Child Research?

As mentioned already, fathers were previously not included in both normal and abnormal developmental research (Lamb, 1975). For almost 40 years, there has been increasing attention to the roles of fathers in normative developmental processes (Biller & Trotter, 1994; Lamb, 1976, 1981, 1997, 2004; Parke, 1996; Pruett, 1998; Zimmerman, Salem, & Notaro, 2000). Research on fathers still lags well behind research on mothers in developmental research. When fathers are included in developmental research, they are almost always from intact families (Zimmerman et al., 2000) and families that represent middle-class Caucasians (Coley, 2001). There is, however, a sizable literature that has accumulated about fathers and normal child development.

The same cannot be said for research on fathers and abnormal child development. In 1992, Phares and Compas reviewed research on abnormal child development and found that fathers were woefully underrepresented. In a review of 577 articles on child psychopathology, they found that 48% of the studies included mothers only, 1% included fathers only, 26% included both
mothers and fathers and analyzed for maternal and paternal effects separately, and 25% of the studies either included mothers and fathers but did not analyze the data separately or more commonly did not specify the gender of the “parents” included in the study (Phares & Compas, 1992). Silverstein and Phares (1996) found the same pattern in dissertation research and Zimmerman et al. (2000) found the same pattern in research on adolescents. Similar patterns of not including fathers in therapeutic treatment have also been documented (Duhig, Phares, & Birkeland, 2002; Lazar, Sagi, & Fraser, 1991).

More recently, Phares et al. (2005) found that fathers continued to be absent from research on developmental psychopathology. In a review of 508 articles, 45% of the studies included mothers only, 2% included fathers only, 25% included both mothers and fathers and analyzed the data separately, 28% either included both mothers and fathers and did not analyze the data separately or more commonly included “parents” with no notation of parental gender (Phares et al., 2005). Data analyses showed that fathers were included in developmental psychopathology research significantly less frequently than mothers and also showed that there were no changes over time since the review completed by Phares and Compas thirteen years previously.

Fathers have also rarely been involved when families seek therapeutic treatment for the children’s and adolescents’ emotional and behavioral problems. This pattern of lack of inclusion of fathers in behavioral as well as family-oriented treatment has been documented for over two decades (Budd & O’Brien, 1982) and continues currently (Duhig et al., 2002). Therapists and clinicians appear to be less likely to engage fathers into the therapeutic process (Duhig et al., 2002; Lazar et al., 1991) and fathers appear to be more reluctant than mothers to participate in the therapeutic process when they are invited (Walters, Tasker, & Bichard, 2001).

Thus, there is clear evidence that fathers are rarely included in research and treatment related to developmental psychopathology. The question remains, however, as to whether researchers in pediatric psychology have a better track record of including fathers in their research. None of the previous reviews (Phares & Compas, 1992; Phares et al., 2005; Silverstein & Phares, 1996; Zimmerman et al., 2000) explored the inclusion of fathers in research on issues related to pediatric psychology. Given the connections between fathers and both normal and abnormal development in children and adolescents, it is important to explore the rates of inclusion of fathers in research on pediatric psychology.

The Current Study: Are Fathers Included in Pediatric Psychology Research?

In the journal Pediatrics, Pruett (1998) made a compelling argument for the importance of fathers. By reviewing the research on infant–father attachment, by highlighting the differences between mother–child and father–child relationships, and by discussing a prospective study of primary caretaking fathers, he set the stage for the importance of including fathers in pediatric practice and pediatric research. It remains to be seen whether researchers in pediatric psychology would be more or less likely than researchers in nonhealth-related research such as developmental psychopathology to include fathers in their studies.

When fathers are included in pediatric psychology research, interesting patterns emerge. As of yet, there have been no meta-analyses to identify the father’s role in pediatric issues and treatment outcome, but it appears that there are both common and unique features of fathers compared with mothers in pediatric psychology. Related to childhood cancer, mothers’ and fathers’ reports of affective responses (i.e., symptoms of depression and anxiety) did not differ (Frank, Brown, Blount, & Bunke, 2001) and their psychological symptoms remained high at 6 months and 18 months after the diagnosis (Sloper, 2000). Both mothers’ and fathers’ level of anxiety predicted posttraumatic stress disorder (PTSD) symptoms in a study of parents of survivors of childhood cancer (Kazak et al., 1998). Mothers and fathers did not differ in their reports of quality of life at the time of diagnosis of their child’s cancer, but mothers coped more effectively and reported higher rates of coping than fathers when faced with a diagnosis of cancer in their child (Goldbeck, 2001).

Interesting findings also emerge for paternal and maternal characteristics related to many other pediatric issues, such as cystic fibrosis (Quittner et al., 1996) and spina bifida (Holmbeck, Li, Schurman, Friedman, & Coakley, 2002). For example, mothers and fathers of children with cystic fibrosis reported similar types of challenges regarding problematic situations for treatment adherence (Quittner et al., 1996). For parents of children with spina bifida, both mothers and fathers showed more overprotectiveness with their children than parents with able-bodied children (Holmbeck, Johnson, et al., 2002), but there were somewhat different patterns of parental functioning. When compared with parents of able-bodied children, fathers of children with spina bifida showed heightened levels of psychological symptoms, whereas mothers of children with spina bifida showed greater social isolation and lower
personal competence (Holmbeck, Gorey-Ferguson, Hudson, & Seefeldt, 1997). Overall, these studies suggest that there are many similarities between mothers and fathers of chronically ill children but they also point to somewhat different roles that parents might play in dealing with children’s health issues. These studies also highlight the importance of including fathers in pediatric research. A number of scholars, however, have noted the scarcity of fathers in research on pediatric psychology (Quittner & DiGirolamo, 1998; Seiffge-Krenke, 2002). As of yet, there has been no empirical documentation of the patterns of inclusion of fathers in research on developmental psychopathology in contrast to pediatric psychology. This study reviewed 8 years of published research on developmental psychopathology and pediatric psychology to explore the patterns of inclusion of fathers in research on pediatric psychology.

Method

A review of 17 journals was completed over the course of 8 years of published research to explore these issues. Journal articles published between January, 1996, and August, 2003, were reviewed. Eight of the journals were identical to the journals reviewed by Phares et al. (2005): Child Development, Developmental Psychology, Journal of Abnormal Child Psychology, Journal of Abnormal Psychology, Journal of the American Academy of Child and Adolescent Psychiatry, Journal of Child Psychology and Psychiatry and Allied Disciplines, Journal of Clinical Child Psychology, and Journal of Consulting and Clinical Psychology. One journal, Journal of Family Psychology, was included due to its relevance to developmental psychopathology as well as pediatric psychology. The Journal of Family Psychology had not been included in the review by Phares et al. (2005) because it did not exist when the review by Phares and Compas (1992) was completed. Eight additional journals, Journal of Pediatric Psychology, Pediatrics, Journal of Pediatrics, Children’s Health Care, Journal of Pediatrics and Child Health, Pediatrics International, Journal of Clinical Psychology in Medical Settings, and Health Psychology were added to the current review to gain a more thorough review of research in pediatric psychology. On the basis of a power analysis (power of 0.80, $p < .05$), a minimum of 121 studies would be required to detect a medium effect size (Cohen, 1992).

Articles were included in this study if the researchers explored some aspect of parenting or parental characteristics in relation to children’s or adolescents’ functioning. Studies were categorized as relating to developmental psychopathology (i.e., clinical issues, emotional and behavioral problems, or specific types of psychopathology) or pediatric psychology (i.e., characteristics that were explored within the context of some type of behavioral issue or disorder in pediatric psychology). Although the definition of pediatric psychology has been debated for many years (Ammerman & Campo, 1998; Mesibov, 1991; Roberts, 1995), the following definition from the Journal of Pediatric Psychology was used in this study. Specifically, studies were categorized into the pediatric group if they explored “the inter-relationship between the psychological and physical well-being of children, adolescents and families.” The research team had extensive discussions of topics that would be placed in each of those categories and met to discuss articles that were ambiguous as to categorization. Once final categorization was made, one additional rater categorized all of the studies for the purposes of determining inter-rater reliability. There was 99% agreement as to categorization of articles that dealt with clinical versus pediatric issues.

Studies from the Phares et al. (2005) review and appropriate studies from the Journal of Family Psychology were used as the comparison group for research on developmental psychopathology. The Phares et al.’s (2005) review did not include research that was related to pediatric psychology, so no articles overlapped between the two groups.

Studies were also categorized as to who was included in the research (i.e., mothers, fathers, or both) and whether or not maternal and paternal effects were analyzed separately. Thus, there were four categories into which studies were placed:

1. Utilized only mothers or maternal characteristics (Group 1),
2. Utilized only fathers or paternal characteristics (Group 2),
3. Utilized both mothers and fathers and analyzed separately for maternal and paternal characteristics (Group 3), and
4. Either included both mothers and fathers and did not analyze maternal and paternal effects separately (e.g., included predominantly mothers and a few fathers and did not have the power to analyze for maternal and paternal effects separately) or did not specify the gender distribution of the “parents” that were included in the sample (Group 4).

For researchers interested in exploring associations between children’s functioning and both paternal and
maternal associations, Group 3 is the most meaningful category. Specifically, researchers interested in the roles of fathers and mothers in children’s well-being rely on research that includes paternal and maternal characteristics and presents analyses separately for both fathers and mothers.

For inclusion in this study, articles had to be empirical (i.e., not review articles or case studies), focus on some aspect of the parents (i.e., not solely about the child), and focus on some aspect of the child or adolescent (i.e., not solely about the parent). Within this context, methodology could include the child or parent participants themselves or could include others’ reports of the child or parent (e.g., mothers’ reports of fathers’ characteristics).

Results

A total of 726 articles were identified that were appropriate for this review. The data were analyzed with chi-square analyses in two ways—first based on type of journal and then based on categorization of research. Based on journal type, 179 articles were identified in health-related journals (i.e., Journal of Pediatric Psychology, Pediatrics, Journal of Pediatrics, Children’s Health Care, Journal of Pediatrics and Child Health, Pediatrics International, Journal of Clinical Psychology in Medical Settings, and Health Psychology) and 547 articles were identified in nonhealth-oriented journals (i.e., all of the other nine journals). Table I summarizes the distribution of articles based on whether or not fathers were included in the research. As seen in Table I, fathers were underrepresented in this research and studies that analyzed paternal and maternal effects separately (Group 3) were notably scarce in research published in health-related journals; $\chi^2(3) = 26.20; p < .001$. Note that 8.9% of the articles in pediatric and health journals would be useful to researchers who were trying to establish similarities and differences between mothers and fathers in relation to children’s psychological functioning in relation to their physical well-being. The comparable percentage in the nonhealth-related journals was 25.8%.

One other way that the data could be explored related to the way in which studies were categorized. Specifically, studies of pediatric issues might have been published in nonhealth-related journals and conversely, studies of developmental psychopathology without reference to health-related issues might have been published in the health-related journals. Table II summarizes the distribution of articles based on how the studies were categorized (i.e., clinical or pediatric and health). As can be seen in Table II, fathers were underrepresented in the research, in both clinical and pediatric research, and studies in which fathers and mothers were analyzed separately (Group 3) were particularly underrepresented in pediatric and health-related research:

<table>
<thead>
<tr>
<th>Research included</th>
<th>Nonhealth journals</th>
<th>Pediatric and health journals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mothers only</td>
<td>243 (44.4%)</td>
<td>102 (57.0%)</td>
</tr>
<tr>
<td>2. Fathers only</td>
<td>13 (2.4%)</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>3. Both mothers and fathers (and analyzed separately)</td>
<td>141 (25.8%)</td>
<td>16 (8.9%)</td>
</tr>
<tr>
<td>4. Included mothers and fathers but did not analyze separately or included “Parents”</td>
<td>150 (27.4%)</td>
<td>60 (33.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>547</td>
<td>179</td>
</tr>
</tbody>
</table>

Numbers 1–4 refer to group number as delineated in the text. $\chi^2(3) = 26.20; p < .001$ for comparison of journal types.

<table>
<thead>
<tr>
<th>Research included</th>
<th>Clinical journals</th>
<th>Pediatric and health journals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mothers only</td>
<td>268 (46.7%)</td>
<td>77 (50.6%)</td>
</tr>
<tr>
<td>2. Fathers only</td>
<td>13 (2.3%)</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>3. Both mothers and fathers (and analyzed separately)</td>
<td>141 (24.9%)</td>
<td>16 (10.5%)</td>
</tr>
<tr>
<td>4. Included Mothers and Fathers but did not analyze separately or included “Parents”</td>
<td>152 (26.5%)</td>
<td>58 (38.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>574</td>
<td>152</td>
</tr>
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</table>

Numbers 1–4 refer to group number as delineated in the text. $\chi^2(3) = 18.62; p < .001$ for comparison of topic of research.
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Phares, Lopez, Fields, Kamboukos, and Duhig on nonhealth-related topics. The pattern of inclusion of parents that appears to distinguish between research on developmental psychopathology and research on pediatric psychology is that researchers in pediatric psychology appear to be less likely to explore paternal and maternal effects separately when compared with researchers in the area of developmental psychopathology (Group 3 vs. Group 4). Specifically, the third category of exploring mothers and fathers separately was notably small for pediatric research in both sets of analyses. The fourth category, “included mothers and fathers but did not analyze separately or included ‘parents’ but did not analyze for maternal and paternal effects separately,” was notably higher in research published in health-related journals and in research that was health- and pediatric-related regardless of where it was published.

Discussion

This study shows that in pediatric research, as in research on developmental psychopathology, fathers are underrepresented. The interesting layer of additional information that was gained in this study is that pediatric researchers are even more likely than clinical child researchers to either include mothers and fathers but not analyze for separate effects (often because the sample size of mothers and fathers is not adequate for separate analyses) or to describe their participants as “parents” without any indication of whether the parents are mothers or fathers. Thus, there are a number of clear messages from this study. Not only should fathers be included more routinely in pediatric- and health-related research, but greater attention should be given to analyzing for maternal and paternal effects separately when fathers are included in studies.

Historically, there has been a pattern of not including fathers in research of clinical child issues (Phares, 1992) and it is not surprising to find this pattern in research on pediatric issues. There are many possible reasons for the lack of inclusion of fathers in research, including theory-driven research that has marginalized fathers and centralized mothers (Silverstein, 2002), challenges in recruiting fathers into research (Costigan & Cox, 2001), and an overall lack of attention to fathers’ potential influences on their children (Zimmerman et al., 2000). None of these reasons, however, negate the fact that pediatric researchers should be more cognizant of the roles of fathers in the connections between psychological and physical functioning in children. The same comments can be made about the inclusion of fathers in therapeutic treatment for both developmental psychopathology and pediatric issues. Fathers have rarely been included in the therapeutic process in the treatment of children’s mental health (Duhig et al., 2002) and family-based interventions in pediatric psychology (Seiffge-Krenke, 2002).

When fathers are included in empirical and therapeutic interventions in pediatric psychology, interesting patterns emerge. For example, in the area of pediatric psychosocial oncology, mothers’ and fathers’ experiences of depressive symptoms (Frank et al., 2001) and PTSD symptoms (Kazak et al., 1998) were comparable. Differences emerge, however, when child gender is taken into account (Hill, Kondryn, Mackie, McNally, & Eden, 2003). For example, lower levels of encouragement from fathers was associated with poorer peer relationships for girls and more maladaptive daily coping for boys (Hill et al., 2003).

Although these results are specific to families who are coping with childhood cancer, there are comparable patterns of both similarities and differences in mothers and fathers dealing with juvenile rheumatoid arthritis (Gerhardt et al., 2003), children’s cystic fibrosis (Quittner et al., 1996; Sanders, Turner, Wall, Waugh, & Tully, 1997), childhood diabetes (Seiffge-Krenke, 2002; Wysocki et al., 1997), children’s epilepsy (Brown & Jadresic, 2000), children’s asthma (Gartland & Day, 1999), pediatric lung transplants (Thompson, DiGirolamo, & Mallory, 1996), children’s spina bifida (Holmbeck et al., 1997; Holmbeck, Li, et al., 2002), parental HIV and AIDS (Brook et al., 2002; Lee & Rotheram-Borus, 2002), and parental cancer (Compas, Worsham, Epping-Jordan, & Grant, 1994; Compas, Worsham, Ey, & Howell, 1996). The details of these studies are beyond the scope of this article, but the overall patterns of findings suggest that there are more similarities than differences between mothers and fathers of chronically ill children. This summary is consistent with research on mothers and fathers of children with emotional and behavioral problems (Phares, 1999). Thus, although fathers are rarely included in research on issues related to pediatric psychology, important and meaningful findings emerge when fathers are included in research designs.
Given the scarcity of fathers in research designs paired with the important patterns that are found when fathers are included in research designs and therapeutic interventions, there are concrete steps that researchers and clinicians can take to increase the inclusion of fathers in pediatric research and interventions.

**How Can Fathers be Included in Pediatric Research?**

At the heart of any research project is the initial design, including the research hypotheses to be explored, the constructs to be examined, the participants to be recruited, and the analyses to be conducted. Phares (1996a) argued that researchers should attempt to provide parallel investigations of mothers and fathers for any variables that relate to parenting. Thus, any time a characteristic of mothers is investigated, the researchers should also explore that characteristic in fathers. There are very few characteristics that cannot be explored through parallel investigations. Even characteristics having to do with pregnancy and postpartum issues can be explored in parallel fashion for mothers and fathers. For example, couvade syndrome, where expectant fathers show similar physiological symptoms as expectant mothers, has been documented in numerous cultures (Munroe, 1999) and even in adolescent fathers (Kiselic & Scheckel, 1995). Similarly, postpartum depression has been documented in fathers as well as mothers (Carro, Grant, Gutlib, & Compas, 1993; Dudley, Roy, Kelk, & Bernard, 2001; Matthey, Barnett, Howie, & Kavanagh, 2003). Thus, researchers are encouraged to conduct parallel investigations for both maternal and paternal processes.

Even if fathers are impossible to access (e.g., they live far from the child or they have almost no contact with the child), researchers can still try to collect information about them. There are a number of measures that can be completed by older children and adolescents about their parents’ behavior, such as the Children’s Report of Parental Behavior Inventory—Revised (Schuldermann & Schuldermann, 1970), the Parental Bonding Inventory (Parker, Tupling, & Brown, 1979), and the Lum Emotional Availability of Parents Scale (Lum, Phares, & Roberts, 1996). The Perceptions of Parents measure (Phares & Renk, 1998) was even developed to be completed by older children and adolescents who do not have any contact with their father or mother. Another possible strategy is to use mothers to report on fathers’ characteristics (Caspit et al., 2001). This strategy can be better than completely ignoring paternal characteristics, but maternal reports of paternal behavior must be used with caution. For example, although mothers’ and fathers’ reports of paternal antisocial behavior are related significantly, mothers reported significantly lower rates of paternal antisocial behavior than did fathers (Caspit et al., 2001). It has also been well established that mothers report lower levels of paternal involvement with children than do noncustodial fathers (Seltzer & Brandreth, 1994). There are also numerous problems with using only one source of information (Holmbeck, Li, et al., 2002), such as using only mothers’ reports of children’s, mothers’, and fathers’ functioning. Thus, although using mothers or other informants as a proxy for fathers’ reports are better than nothing, there are clear limitations to using this strategy.

Once the design is established and constructs are identified, researchers must make concerted efforts to recruit fathers into pediatric research projects. At a minimum, researchers should seek to contact fathers directly to invite them into the research project. There are concerns that mothers may serve a gatekeeping function when they are the ones who are asked to convey information about research projects to fathers, and thus, direct contact between the researcher and the father may be beneficial in recruiting more fathers into studies (Costigan & Cox, 2001). Although it is an empirical question that has yet to be asked or answered, it is possible that fathers may be more willing to participate in research if they are contacted by a male researcher rather than a female researcher (Phares, 1996a). Researchers may also gain better access to fathers through alternative recruitment strategies (e.g., contacting fathers through their place of employment rather than through their children’s school, meeting with fathers face-to-face while they are visiting their hospitalized child or attending medical appointments).

The way that research is framed for the helpfulness to the family may also impact fathers’ participation. For example, fathers involved in clinical treatment trials for their children’s cancer were more likely to report that they were participating to help their child when compared with fathers who were participating in survey research (who reported altruistic reasons for research participation in a study of childhood cancer; Liaschenko & Underwood, 2001). Fathers may also be more likely to participate in research that is framed for the importance of fathers in children’s lives (Costigan & Cox, 2001).

Overall, researchers must reflect on their own definition of “fathers” as they attempt to recruit fathers into their studies. Coley (2001) wrote eloquently about the importance of including “(in)visible men” (i.e., low-income, unmarried, minority fathers) into research.
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projects. A number of scholars have also highlighted the importance of including African American fathers in agendas related to research and treatment (Franklin & Davis, 2001; Jarrett, Roy, & Burton, 2002). This acknowledgment of diversity would also lead researchers to be more cognizant of alternative ways in which children are parented. Specifically, researchers are called upon to expand their working definition of fathers to include noncustodial fathers, father-figures who may or may not be biologically or legally connected to the child, gay fathers, and transgendered fathers (Jarrett et al., 2002; Lerman & Sorensen, 2000; Levine, 1993; Parke, 2002; Patterson & Chan, 1997; Silverstein, 2002).

In describing sample characteristics, researchers should attempt to be thorough about how mothers and fathers were targeted for recruitment, what percent of mothers versus fathers refused to participate in the study, and how the research design accommodated the inclusion of both mothers and fathers (Costigan & Cox, 2001). If fathers are not included in the research design, researchers should provide a specific rationale for their lack of inclusion (Phares, 1992).

During the data collection phase of the project, researchers should attempt to have family-friendly strategies for data collection (Phares, 1996a). For example, Churven (1978) found significantly greater participation rates of fathers and mothers who were first interviewed in the home and subsequently interviewed in a clinic or university setting. Naturally occurring family activities, such as audiotaping or videotaping dinnertime conversations, can be used as a strategy with intact families or for parent–child interactions of children who live with one parent and visit the other (Jacob, Tennenbaum, Seilhamer, Bargiel, & Sharon, 1994). Telephone interviewing has also been found to be an effective modality through which to access fathers in health-related research (Kirsch & Brandt, 2002).

If the data collection is based in a clinic, hospital, or university setting, other strategies can be used to make the settings more amenable to involvement of both fathers and mothers. In families where the parents are separated, divorced, or never married, researchers should consider offering separate research appointments for each of the parents (assuming that mother–father interactions are not the focus of the study). This strategy may allow parents with high levels of conflict to feel more comfortable in participating in the research, because they would not be forced to interact with the other parent during data collection. Researchers should also consider offering free transportation to the research site to recruit more economically diverse samples of fathers. Other than in studies of single children where there are no other siblings, researchers should offer free, high-quality child care at the research site during data collection to allow fathers and mothers an environment where they can focus on the research task at hand rather than tending to young children (Bosco, Renk, Dinger, Epstein, & Phares, 2003).

At the point of data analyses, researchers are encouraged to provide separate analyses for maternal and paternal characteristics in a parallel fashion (Phares, 1996a; Zimmerman et al., 2000). The current finding that over one third of pediatric studies included both mothers and fathers but did not analyze the data separately or included “parents” without distinguishing the gender of the parent is troubling. The former pattern may be due to researchers having only included a handful of fathers, which prevented separate analyses of maternal and paternal effects due to lack of statistical power. It was not uncommon to find articles where researchers described their sample as including 95% mothers and 5% fathers. The latter pattern of only describing the participants as “parents” should be easy to correct with more conscientious writing and editing. In an effort to move the field in a direction toward a better understanding of maternal and paternal processes, researchers are encouraged to be specific about the description of their samples and to specify the gender and relationship of the parent (e.g., mother, father, stepmother, stepfather, caretaking maternal grandmother). Only with this type of specificity can research projects be replicated and extended to understand further the complex connections between pediatric issues and family functioning.

Consistent inclusion of fathers in pediatric research can promote generalizable research findings (Costigan & Cox, 2001; Phares, 1996b). The same issues often apply to the inclusion of fathers in therapeutic interventions for pediatric issues.

How Can Fathers Be Included in Family-Based Interventions in Pediatric Psychology?

Nearly all of the suggestions listed above for increasing paternal engagement in pediatric research can be applied to the engagement of fathers in family-based interventions in pediatric psychology. Contacting fathers directly to invite them to participate in therapeutic interventions has been suggested by a number of scholars and clinicians as an effective way to increase paternal involvement in therapy (Carr, 1998; Duhig et al., 2002; Lazar et al., 1991; Phares, 1996b; Walters et al., 2001). If feasible, clinicians can make therapeutic interventions contingent...
on participation of all relevant caretakers including fathers (Hecker, 1991). Because the number of family-related courses during graduate training (Lazar et al., 1991) and the number of recent family-related continuing education courses (Duhig et al., 2002) are associated with a greater likelihood of including fathers as well as mothers in therapy, pediatric psychology training programs could increase the emphasis on family-related training and highlight the importance of continuing education in the realm of family-based interventions.

Although fathers are routinely not included in pediatric interventions (Seiffge-Krenke, 2001, 2002), there are clear indications of the importance of including fathers in family-based interventions in pediatric psychology. For example, in families with a diabetic adolescent, fathers were less engaged in communication and more withdrawn than fathers in families with physically healthy children (Seiffge-Krenke, 2002). In fact, diabetic adolescents appeared to desire and ask for more involvement from their fathers. These patterns could be reasonable targets of family-based interventions. One study explored the treatment preferences of families with a diabetic adolescent and found that mothers, fathers, and adolescents reported greater satisfaction with Behavioral Family Systems Therapy in contrast to Education and Support Groups, but this difference was less pronounced for fathers in comparison to mothers and adolescents (Wysocki et al., 1997).

In working with families with a child diagnosed with spina bifida, it may be helpful for clinicians to know that both mothers and fathers showed higher levels of overprotection than mothers and fathers of physically healthy children (Holmbeck, Johnson, et al., 2002). Interestingly, children's lower levels of behavioral autonomy served as a mediator between parental overprotection and children's externalizing behavior problems in the spina bifida group but not the control group. It is also important for clinicians to know that both mothers and fathers of youngsters with neural tube defects like spina bifida show patterns of chronic sorrow that last well beyond the time of diagnosis (Hobdell & Deatrick, 1996).

Expressed emotion is also of great importance to interventions with families who have a chronically ill child. In families dealing with childhood asthma, fathers who had higher rates of negative expressed emotion and especially greater critical comments tended to have children who missed school more often because of their illness (Gartland & Day, 1999). Negative parental expressed emotion was also related to greater frequency of seizures in children diagnosed with epilepsy (Brown & Jadresic, 2000). Specifically, paternal critical comments and maternal over involvement were related to greater symptomatology in the children.

Within the realm of HIV and AIDS, a number of family studies speak to the need for family-based interventions. One study of children with parents diagnosed with HIV or AIDS found that mothers disclosed their health status earlier than did fathers (Lee & Rotheram-Borus, 2002). This pattern of disclosure of parental illness parallels that of other physical illnesses (Lee & Rotheram-Borus, 2002). There has also been a great deal of attention to pediatric HIV and AIDS. Fathers of children with HIV and AIDS reported that interventions like gender-specific support groups would be highly desirable in trying to deal with their child’s illness (Wiener, Vasquez, & Battles, 2001). From a prevention standpoint, Werner-Wilson and Fitzharris (2001) made a strong call to get fathers as well as mothers more actively involved in sexuality education of adolescents to prevent the risk of HIV and AIDS.

Regardless of the type of family-based intervention that is established, it will be important for researchers to examine the effectiveness of the intervention. For example, one well-intentioned psychoeducational program for children with cystic fibrosis and their families found some positive effects (children's search for social support increased) but a number of null results (fathers’ and mothers’ coping and health beliefs did not change due to the intervention) and even negative results (lowered levels of competence and optimism after the intervention; Goldbeck & Babka, 2001). Thus, the importance of establishing empirically supported treatments and best practices remains necessary when including fathers in family-based interventions in pediatric psychology.

Overall, there is compelling evidence to support increased attention to fathers' involvement in pediatric research and treatment. There is clear evidence of underrepresentation of fathers in research and treatment in pediatric psychology and there is an equally clear need for a change in this pattern. A better understanding of the father’s role in pediatric psychology from a research standpoint and a more routine inclusion of fathers in family-based interventions in pediatric psychology are likely to lead to more informed research and more effective treatments.

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References


