

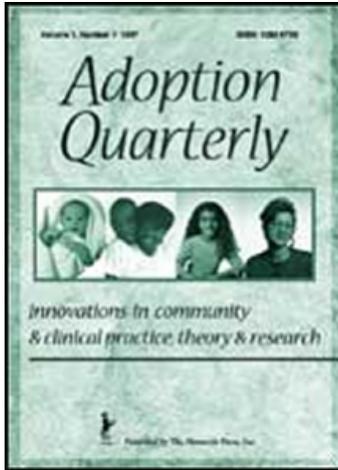
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Publisher Routledge

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Adoption Quarterly

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t792303958>

Adaptation to Parenthood During the Post-Adoption Period: A Review of the Literature

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Online publication date: 26 May 2010

To cite this Article McKay, Katherine , Ross, Lori E. and Goldberg, Abbie E.(2010) 'Adaptation to Parenthood During the Post-Adoption Period: A Review of the Literature', *Adoption Quarterly*, 13: 2, 125 – 144

To link to this Article: DOI: 10.1080/10926755.2010.481040

URL: <http://dx.doi.org/10.1080/10926755.2010.481040>

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Adaptation to Parenthood During the Post-Adoption Period: A Review of the Literature

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Substantial research has been conducted on new parents' adjustment during the transition to biological parenthood. However, very little is known about adjustment experiences during the transition to adoptive parenthood. Such information could assist in creating support systems for adoptive parents similar to those that currently exist for biological parents. A systematic literature review was conducted to examine individual and relational adjustment outcomes during the transition to adoptive parenthood, limited to those studies that examined the immediate post-adoption period through 3 years post-placement. By searching six databases using a variety of keywords including post-adoption, adapt, and parent, 11 research studies were identified that reported on parental mental health, physical health, and intimate partner relationship satisfaction in the immediate post-adoption period. The studies reviewed appear to indicate that post-adoption depression is relatively common, although perhaps less so than depression among biological parents. It is difficult to draw conclusions about physical health and relationship satisfaction as only one study directly assessing each outcome was located. Findings suggest that additional research is warranted

Received 15 December 2008; revised 12 June 2009; accepted 8 March 2010.

Lori E. Ross is supported by a New Investigator Award from the Canadian Institutes for Health Research and the Ontario Women's Health Council, Award NOW-84656. In addition, support to the Centre for Addiction & Mental Health for salary of scientists and infrastructure has been provided by the Ontario Ministry of Health and Long Term Care. The views expressed here do not necessarily reflect those of the Ministry of Health and Long Term Care.

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to provide a clearer characterization of physical and psychological adaptation to parenthood among adoptive parents.

KEYWORDS *adoption, adoptive parenting, post-adoption, health, mental health, relationship quality, transition to parenthood*

The predominant focus of adoption literature has been on the outcomes of adopted children: historically, research has focused on the psychological, intellectual, and physical vulnerabilities and adaptation of adopted children (Brodzinsky & Huffman, 1988; Wegar, 1995). This may be a result of the ongoing debate in the literature regarding the degree to which adopted children suffer from such vulnerabilities (Wegar, 1995). As a result of this research focus, less attention has been paid to examining physical and psychological outcomes among adoptive parents.

This lack of attention is notable in light of research that has demonstrated that the transition to biological parenthood is often characterized by a period of psychological adjustment. Informed by family stress theory (Patterson, 1983; Patterson & Garwick, 1994), this article assumes that the transitional adjustment period to parenthood constitutes an interactional process. From this perspective, parents are faced with demands (stressors, hassles, daily strains), which are buffered by facilitating factors (physical and emotional resources) as they adapt to the parenting role. When demands and facilitating factors are balanced, the transition to parenthood is more likely to be experienced positively. Conversely, when demands outweigh resources, adjustment is likely to become increasingly difficult. Consistent with this theory, research has shown that the transition to parenthood is difficult for many individuals, who often experience negative changes in mental health (Campbell & Cohn, 1991), physical health (Gjerdingen & Center, 2003; Thompson, Roberts, Currie, & Ellwood, 2002), and intimate partner relationship dynamics (Ceballo, Lansford, Abbey, & Stewart, 2004; Cox, Paley, Burchinal, & Payne, 1999; Ward, 1998).

Further, it appears that mental health, physical health, and intimate partner relationship functioning among new parents are closely related to one another: for example, one study of biological parents identified a positive correlation between poor postpartum physical and mental health and declines in the quality of marital relationships (Cox et al., 1999). Similarly, Rini, Dunkel, Hobel, Glynn, and Sandman (2006) reported that when women perceived intimate partner support as "effective," they reported less anxiety and greater overall psychological well-being. The authors suggest that when support is appraised as "effective," the parent's ability to address the stress that may accompany a major life transition is enhanced. Supporting this is research that indicates that poor marital and social supports represent risk factors for depressed mood during the first year postpartum (e.g., Semyr, Edhborg, Lundh, & Sjogren, 2004).

Research such as this has assisted clinicians in tailoring mental health services to meet the needs of biological parents during the postpartum period. For example, interventions such as interpersonal psychotherapy have been specifically adapted to the postpartum context and have demonstrated effectiveness for this population (Ross, Dennis, Robertson Blackmore, & Stewart, 2005). Yet, adoptive parents also experience a series of challenging transitions during the post-adoption period. In fact, existing research suggests that adoptive parents face unique obstacles, emotions, and transitions as they adapt to parenthood (Fontenot, 2007; Levy-Shiff, Goldshmidt, & Har-Even, 1991). Adoptive parents' transition to parenthood is uniquely distinguished by experiences with infertility (Cohen, Coyne, & Duvall, 1993; Daniluk & Hurtig-Mitchell, 2003), navigating first-time parenthood at an older age, on average (Ceballo et al., 2004; Cohen et al., 1993; Dean, Dean, White, & Liu, 1995; Gjerdingen & Froberg, 1991), an increased likelihood of parenting children with preexisting behavioral/emotional difficulties (Glidden, 2000; Glidden & Floyd, 1997; Lazarus, Evans, Glidden, & Flaherty, 2002; Mainemer, Gilman, & Ames, 1998; McGlone, Santos, Kazama, Fong, & Mueller, 2002), an increased likelihood of parenting children who are of a different race (Lazarus et al., 2002), and the stigma attached to adoption (Wegar, 1995).

Despite these unique experiences, the extant research on parental outcomes during the transition to parenthood focuses predominately on biological parents. Yet, it is unknown whether support services with established efficacy for biological parents during the postpartum period (as reviewed in Ross et al., 2005) are adequate to serve the unique needs of adoptive parents during the post-adoption period. This is despite research showing that support is important to adoptive parents during the post-adoption period. For example, in their study of post-adoption support needs, Atkinson and Gonet (2007) conducted interviews with 500 adoptive families and found that adoptive parents indicated that support (defined as self-help and peer support from other adoptive parents) throughout the post-adoption period was crucial for family cohesion.

What remain unknown are the specific parent health domains where support is needed. It is crucial to identify these areas as research has shown that parental health and mental health problems can negatively impact children's psychological development (Walsh et al., 2009). Focused interventions for parents have the potential to optimize the health of the entire family unit. However, only once health domains among adoptive parents have been identified will adoption service providers be able to target services to meet their needs. Thus, the goal of this article is to summarize those studies that have examined mental health, physical health, and relationship satisfaction outcomes among adoptive parents during the post-adoption period. We conclude with a discussion focused on future directions for research on the transition to adoptive parenthood and on parental outcomes during this transition, specifically.

METHODOLOGY

Systematic Research Synthesis

To conduct our analysis, we followed the procedures associated with systematic research synthesis (SRS) (Rothman, Damron-Rodriquez, & Shenassa, 1994). One of the primary aims of SRS is to conduct a structured conceptual analysis within a specific topic area (Kadushin, 2004). In accordance with this methodology, we comprehensively searched the following electronic research databases: (1) PsychINFO; (2) Social Services Abstracts; (3) Sociological Abstracts; (4) Social Work Abstracts; (5) MEDLINE; and (6) PubMed, using the following keywords and their possible combinations: adopt, post-adoption, parent, adoptive parent, adapt, depression, psychopathology, distress, stress, mental health, mental illness, relationship quality, relationship satisfaction, relationship health, physical health, transition, parenting stress, health.

We limited our review to journal articles published between 1990 and June 1, 2009, that assessed the transition to adoptive parenthood during the immediate post-adoption period. Traditionally, the first year postpartum has been considered the time of greatest risk for psychopathology among biological parents (Gavin et al., 2005). For comparison purposes, we intended to review only those studies that assessed the transition to adoptive parenthood during the first year post-adoption. However, only eight studies were identified that met this inclusion criterion. Thus, we extended the inclusion period to 3 years after the child was placed within the home, which allowed us to include an additional three studies. This is consistent with recent research indicating that psychological distress often continues beyond the first postpartum year among biological parents (Goodman, 2004; Mayberry, Horowitz, & Declercq, 2007). For the purposes of this article, reference to "post-adoption" is being defined as the time period after the child was placed into the home.

Further, to be included in the review, papers had to be peer-reviewed manuscripts. Thus, published reports and dissertations were excluded. The first author of this article conducted the initial screening of the manuscripts. The first and second authors were then consulted as to which of the previously screened manuscripts were eligible for inclusion based upon the aforementioned criteria. In addition, the third author of this article conducted a literature search utilizing systematic research synthesis to ensure that no eligible articles had been overlooked. Upon reviewing the eligible research papers, if a reference was subsequently identified within one of these papers but had not previously been identified in the original literature search, it was retrieved to determine eligibility.

Studies that focused on individual or relational outcomes among adoptive parents as one of their primary objectives were eligible for the inclusion in this review. The identified studies covered three outcome variables:

mental health, physical health, and intimate partner relationship satisfaction. Considering the limited number of studies which met our inclusion criteria, we took a broad, inclusive approach to each of these variables. "Mental health" included assessments of psychiatric disorders, psychiatric symptoms, or associated factors (i.e., stress). "Physical health" included any standardized assessments of physical health problems or symptoms, such as fatigue and weight gain or loss. Similarly, "relationship satisfaction" included any domain of relationship quality or satisfaction assessed with a standardized instrument.

RESULTS

Utilizing our inclusion criteria, the search yielded 11 articles for review. These studies are summarized in Table 1.

Mental Health

Our review identified a total of 10 studies that provided some assessment of post-adoption mental health. Of these, 4 utilized quantitative survey methodology (Dean et al., 1995; Gjerdingen & Froberg, 1991; McDonald, Propp, & Murphy, 2001; Senecky et al., 2009) and 6 utilized a combination of both quantitative and qualitative methodologies (Gair, 1999; Hollenstein, Leve, Scaramella, Milfort, & Neiderhiser, 2003; Judge, 2003; Mainemer et al., 1998; McCarty, Waterman, Burge, & Edelstein, 1999; McGlone et al., 2002). All of the study designs utilized purposive sampling. There were three recruitment methods utilized to obtain study samples. Dean et al. (1995) and McDonald et al. (2001) recruited participants through state adoption databases. Gair (1999) and Mainemer et al. (1998) drew their samples from participant pools of larger, longitudinal studies investigating the adoption cycle. The remaining 6 studies recruited participants through adoption agencies, programs, and professionals.

Sample sizes ranged from 20 participants (McDonald et al., 2001) to 313 participants (Gjerdingen & Froberg, 1991). Four of the 10 studies investigating mental health included only female participants (Dean et al., 1995; Gair, 1999; Gjerdingen & Froberg, 1991; Senecky et al., 2009). Of the studies that included both male and female participants, women were more likely to volunteer to participate. For example, 71% of the sample in Hollenstein et al. (2003) and more than 90% in Judge (2003) identified as female. Of the 10 studies assessing mental health, only one was inclusive of couples identifying as "gay" (McCarty et al., 1999; the authors did not indicate whether these participants were gay men, lesbians, or both).

TABLE 1 Included Studies of the Transition to Adoptive Parenthood

Author (Date)	Research Focus	Sample	Design	Limitations
Gjerdingen & Froberg (1991)	To investigate health problems in new adoptive and birth mothers 6 weeks postpartum and post-adoption	<ul style="list-style-type: none"> - 108 first-time adoptive mothers; 72 first-time biological mothers; and 133 controls (women between the ages of 18 and 45 without children) - Birth mothers completed the surveys on average 7.7 weeks after giving birth and adoptive mothers completed it on average 5.8 weeks after adopting their babies 	<ul style="list-style-type: none"> - Mental health assessed using 3 subscales from the Mental Health Inventory used in the Rand Health Insurance Experiment 	<ul style="list-style-type: none"> - Differences between groups may be confounded by the recruitment locations; biological mothers and control participants were recruited from medical practices and may have already been facing more physical health problems than women in the general population - Did not distinguish whether the reported psychiatric illness for the group of mothers with adopted and biological children was postpartum, post-adoption, or both
Dean, Dean, White, & Liu (1995)	Comparing the lifetime prevalence of affective disorders in women who have only adopted children with women who have both adopted and biological children	<ul style="list-style-type: none"> - 176 women had adopted but no biological children; 110 women had both adopted and biological children - Depressive disorder was assessed within 12 months of birth or adoption 	<ul style="list-style-type: none"> - Conducted interviews using the PSA to assess current and lifetime psychiatric illness - Interviews were recorded and when a participant reported depression and/or anxiety, their interview was re-rated by a blinded reviewer 	

(Continued on next page)

TABLE 1 (Continued)

Author (Date)	Research Focus	Sample	Design	Limitations
Mainemer, Gilman, & Ames (1998)	To explore parenting stress in parents who adopted children at 8 months or older from Romanian orphanages	3 participant groups: 1. Families (RO) who had adopted a child at 8 months or older from a Romanian orphanage ($n = 43$) 2. Canadian-born (CB) comparison group that included Canadian-born, non-adopted, noninstitutionalized children who were matched on the basis of sex and age to the RO group as best as possible ($n = 43$). 3. A Romanian comparison (RC) group including 23 Romanian orphans adopted at 4 months old who would have grown up in an orphanage had they not been adopted	The study consisted of 2 parts: a) A semistructured interview that collected information on demographics, adoption circumstances, adoption experience, and their child's behavior before coming to Canada b) Parents were asked to complete 3 standardized measurements: PSI, CBC, and the Revised Denver Prescreening Developmental Questionnaire	– Hard to make a comparison between the RC group and the RO group as the RC group had been in their adoptive homes for longer and there were only 23 children in this group compared to 43 in the RO group – Very specific type of adoption makes generalizability limited
Gair (1999)	Analyzing emotional experience of parents throughout the adoption cycle	– 19 participants who had adopted babies and young children up to the age of 5 completed questionnaires and participated in interviews – Retrospectively asked mothers to assess the period immediately after the child was placed in the home	Questionnaire package included the EPDS	– The study was retrospective and about how participants remember experiencing the period after they brought their children home

(Continued on next page)

TABLE 1 (Continued)

Author (Date)	Research Focus	Sample	Design	Limitations
McCarty, Waterman, Burge, & Edelstein (1999)	To investigate the experiences of adoptive parents of children with prenatal substance exposure during the immediate post-placement period	<ul style="list-style-type: none"> - 5 married couples, 4 single parents, 3 gay couples - Children ranged in age from 1 year 5 months to 6 years 7 months - 62% of the children were transracially adopted - The PSI was administered 2 to 4 months post-placement 	1 month prior to the interviews, parents were mailed the PSI	<ul style="list-style-type: none"> - Limited to parents of children with prenatal substance exposure - All parents were already connected with an adoption program assisting them with the transition into adoptive parenting. Thus, their stress levels may be different than parents who do not have access to this service. - Cannot differentiate whether their stress scores are biased by access to the program. - The response rate for the questionnaire was 52%
McDonald, Propp, & Murphy (2001)	Exploring the post-adoption experiences of adoptive parents 18 to 24 months post-placement	<ul style="list-style-type: none"> - 159 adoptive families recruited through the Kansas adoption ledger - Children ranged in age from 1.7 to 2.8 years old - 88.5% of the sample had a child with at least one special need 	Questionnaire package included a Likert-type scale assessing caregiving experiences. It asked parents to rate their experiences from very stressful (1) to very smooth (5)	
McGlone, Santos, Kazama, Fong, & Mueller (2002)	To investigate both the nature and extent of parenting stress among adoptive parents of children with special needs	<ul style="list-style-type: none"> - 25 sets of adoptive parents in Hawaii: 20 married couples, 1 common-law couple, 4 single parents - Age range of children: 12 months to 11.5 years - First interview conducted as close to 3 months post-placement as possible - Second interview conducted approximately 1 year later 	Two major data collection methods: 1. Formal chart review* 2. Surveys and interviews The survey utilized: a) PSI-Short Form b) Likert-type scale to assess family adjustment and cohesion	<ul style="list-style-type: none"> - Small sample of parents who were all using the same adoption service, which was specifically designed for parents of children with special needs The study did not investigate how factors such as the degree of the child's special need may have impacted upon parenting stress

(Continued on next page)

TABLE 1 (Continued)

Author (Date)	Research Focus	Sample	Design	Limitations
Hollenstein, Leve, Scaramella, Milfort, & Neiderhiser (2003)	(1) To examine the knowledge adoptive parents hold about birth parents and how this relates to adoption adjustment (2) To examine the relationship between level of adoption openness and family adjustment	– 90 families Children were adopted before the age of 7 months Time two, median age of child 23 months	– Time one: assessment of infant temperament, DAS and Quick Composite International Diagnostic Interview – Time two: phone interview assessing the adoption process and child behavior	– Authors did not provide tables or computation of statistical analysis for questionnaire scores
Judge (2003)	To explore the sources and variation of parenting stress for parents who adopted children from Eastern Europe	– 109 mother-father dyads who adopted children from Eastern Europe – Both fathers and mothers participated in the study, and all children came from intact families (i.e., not divorced) – Children ranged in age from 5 months to 12 years and had been living with their families for a mean of 6.25 months and no more than 1 year	1. Both parents completed the PSI separately 2. One parent completed two other self-report measures (the Temperament and Atypical Behavior Scale and a medical scale created for the study) and also participated in a telephone interview	– Large age range of children makes it difficult to generalize conclusions beyond the study – Age of the child may have an impact upon mental health and/or stressors adoptive parents face
Senecky, Agassi, Inbar, Hoersh, Diamond, Bergman, et al. (2009)	To evaluate depressive symptomatology in adoptive mothers during the post-adoption period	– 39 adoptive mothers recruited through adoption agencies who had all adopted their children internationally – 22 married, 11 single, and 6 divorced – For 85% of the women this was their first child – Completed surveys 2 months before the adoption and 6 weeks after	– Participants were administered the EPDS, BDI, and BSI – Scores on the standardized measures were compared to published findings in the general population	– Limited generalizability beyond parents who utilize international adoption

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TABLE 1 (*Continued*)

Author (Date)	Research Focus	Sample	Design	Limitations
Gjerdingen & Froberg (1991)	See above	See above	Physical health (used checklist of 70 problems involving many organ systems)	See above
Leve, Scaramella, & Fagot (2001)	To investigate the relationship between family environment and child temperament during the early years of childhood	<p>Physical Health</p> <p>Relationship Quality/ Satisfaction</p> <p>– 99 families with a nonrelative adopted infant completed a questionnaire to assess infant temperament and family environment)</p> <p>– At the time of assessment the mean age of the infants was 5 months (<i>SD</i> = 2.9 months)</p>	<p>The study assessed:</p> <p>a) Infant temperament using the Distress to Limitations and the Fear subscales of the IBQ</p> <p>b) Marital happiness using item 31 from the DAS</p> <p>c) Pleasure in parenting using the 10-item Pleasure in Parenting questionnaire (Fagot, 1995)</p>	The study only used one item to measure marital happiness

Note. BDI = Beck Depression Inventory; BSI = Brief Symptom Inventory; CBC = Child Behavior Checklist; DAS = Dyadic Adjustment Scale; EPDS = Edinburgh Postnatal Depression Scale; IBQ = Infant Behavior Questionnaire; PSA = Psychiatric Assessment Schedule; PSI = Parenting Stress Index.

*Review of case files from the Honolulu Division of Casey Family Programs to gather demographic information about the children and families.

Psychiatric Symptomatology

Four of the 10 studies utilized standardized assessment tools to assess psychiatric symptomatology (i.e., depression) in adoptive parents. Two of these 4 studies included a comparison group of biological parents. Gjerdingen and Froberg (1991) measured parental mental health using three subscales from the Mental Health Inventory (MHI) used in the U.S. Rand Health Insurance Experiment (Veit & Ware, 1983). Their study aimed to investigate the frequency of health problems in first-time adoptive and birth mothers 6 weeks postpartum/post-adoption. Adoptive mothers scored significantly lower on both the anxiety and depression sections of the MHI when compared to both biological mothers and controls (married women without children). Subsequently, positive affect scores for adoptive mothers were significantly higher (indicative of more positive affect) when compared to biological mothers and controls. Overall, adoptive mothers had significantly better mental health outcomes when compared to the other two groups of women.

Utilizing the Psychiatric Assessment Schedule (PAS), Dean et al. (1995) sought to assess current and lifetime psychiatric illness in new mothers. The study included 286 women who had adopted a child aged 12 months or younger. Of the total sample, 176 women had adopted children but no biological children. The remaining 110 women had both adopted and biological children. Using the PAS, Dean et al. (1995) found that 8% of the adoptive mothers without biological children reported experiencing a psychiatric illness within 12 months of adopting their child. In comparison, 15.6% of the women with adopted and biological children reported experiencing a psychiatric illness within 12 months of adopting or giving birth. The difference between the two groups was not statistically significant.

The remaining two studies that included standardized assessment tools assessing psychiatric symptomatology examined adoptive parents in the absence of a biological parent comparison group. Gair (1999) administered the Edinburgh Postnatal Depression Scale (EPDS) to 19 mothers who had adopted children aged 5 and younger. Six mothers (32% of participants) scored above the recommended clinical cutoff of 12/13 on the EPDS, indicating probable major depression. Of those 6 mothers, 5 reported experiencing severe sleep deprivation and 4 reported caring for babies with colic. Gair (1999) suggested that both sleep deprivation and colic are important factors that could account for distress and depression in mothers during the post-adoption period, just as they may be significant for many biological mothers.

Senecky et al. (2009) assessed depressive symptomatology in 39 adoptive mothers pre- and post-adoption, utilizing 3 standardized measures: the Beck Depression Inventory (BDI), the Brief Symptom Inventory (BSI), and the EPDS. In the immediate post-adoption period (6 weeks after the child was placed in the home), 15.4% of the participants had a score of 10 or more

on the BDI, indicative of depressive symptomatology. However, depressive symptoms were also present at the pre-adoption assessment. In fact, when compared to the pre-adoption period, there was a significant decrease in the mean scores for the BSI subscales pertaining to somatization, depression, and paranoid ideation during the post-adoption period. There was a decrease in the mean score for the BDI and EPDS, but neither decline was statistically significant.

Parenting Stress

Broadening the definition of mental health, 4 studies assessed the associated factor of stress utilizing the Parenting Stress Index (PSI). Three of the studies reported that a small percentage of parents had scores indicating clinically significant levels of stress. Of the 109 mother-father pairs who completed the PSI in the study by Judge (2003), 10 mothers (8.3%) and 4 fathers (3.7%) obtained a score above 260, which is indicative of a clinically significant level of stress. Further, on the individual subscales, mothers reported significantly more problems related to depression, whereas fathers reported significantly more problems with social isolation. Similarly, 13% of the sample of adoptive parents of children with prenatal substance exposure in McCarty et al. (1999) had PSI scores in the clinically significant range. For this sample of adoptive parents, a decrease was observed in the mean PSI score a year after the child was placed in the home. The mean score declined to the 60th percentile from the 67th percentile, but this was not significant. McGlone et al. (2002) reported the largest percentage of parents scoring in the clinically significant range for the PSI, which constituted 34.3% of their sample. Further, when PSI scores were correlated with measures of family cohesion and family adjustment, an inverse relationship was observed (-0.49 and -0.81 , respectively). Finally, although Mainemer et al. (1998) also utilized the PSI, the clinical significance of the scores was not reported.

Of the 4 studies utilizing the PSI, 2 reported a strong positive correlation with child behavioral problems. Mainemer et al. (1998) reported a significant positive correlation (0.72) between parenting stress and child behavior problems in their subsample of parents adopting infants from Romanian orphanages. Correlations were not reported for the comparison groups. Similarly, child behavior problems were the strongest correlate of parenting stress outcomes for both mothers (0.55) and fathers (0.68) in Judge (2003).

The final two studies measuring parental mental health utilized measures created for their specific studies. McDonald et al. (2001) assessed caregiving stress by using a Likert-type scale, asking parents to rate their experiences of caregiving over the past year from "very stressful" (1) to "very smooth" (5). Overall, the mean response was 3.5, indicating that families had found their caregiving experience to fall between "an even mixture of stressful

and smooth" (3) and "smooth" (4). The authors also developed a placement adjustment scale and then correlated this with caregiving stress. A higher score on the placement adjustment scale (indicating a smoother adjustment) was associated with less caregiving stress over the past year. Further, married parents were significantly more likely to report positive adjustment than were unmarried parents (both single and coupled).

Finally, Hollenstein et al. (2003) reported that desire to change the level of adoption openness in either direction (more or less) was greater for those parents who were unhappy in their marriages and/or who were depressed. They do not report the strength of this correlation or whether it was statistically significant. Further, Hollenstein et al. do not report scores on the Dyadic Adjustment Scale (DAS) or the Quick Composite International Diagnostic Interview (CIDI-Short Form), which were utilized to assess marital satisfaction and depressive symptomatology in their sample.

Physical Health

Our review identified only one study that assessed the physical health status of adoptive parents. Gjerdingen and Froberg (1991) examined the frequency of various health problems in new adoptive mothers, birth mothers, and a comparison group of married women without children, using a checklist of 70 potential health problems. No psychometric data were provided for this instrument. The birth mothers completed the survey an average of 7.7 weeks postpartum and the adoptive mothers completed it an average of 5.8 weeks after children were placed in the home. The mean age of the adopted children was 6.6 months.

Of the three participant groups, adoptive mothers had the fewest physical problems, with a mean of 2.92 problems per person. In comparison, biological mothers reported a mean of 4.06 physical problems per person and control subjects reported a mean of 4.41. This difference between groups was statistically significant. Groups also differed in their frequency of reporting specific health problems: biological mothers reported significantly more breast and genitourinary problems than either the control group or adoptive mothers, while the control group reported significantly more problems relating to their head, eyes, ears, nose, skin, and hair than either biological or adoptive mothers.

Intimate Partner Relationship Satisfaction

Only one study identified in this review assessed satisfaction with intimate partner relationships among recent adoptive parents. Leve, Scaramella, and Fagot (2001) utilized one item from the DAS wherein each participant was

asked to rate their level of marital happiness on a 5-point Likert-type scale. Both mothers and fathers reported high levels of marital satisfaction, with mean scores of 4.3 and 4.6, respectively. Participants were assessed within the first year post-adoption. There was no comparison group of biological parents in this study.

DISCUSSION

As this review indicates, research investigating the experiences of adoptive parents in the immediate post-adoption period is sparse. After an extensive search, only 11 relevant research studies investigating the health, mental health, or intimate partner relationship quality of adoptive parents during the immediate post-adoption period were identified. This is surprising in light of the voluminous literature examining the transition to parenthood among biological parents (Glade, Bean, & Vira, 2005; Nyström & Öhring, 2004). However, even these limited data indicate that adoption may have important implications for adoptive parents' mental health.

With respect to mental health, rates of distress appear to be lower than those reported among biological parents (Gavin et al., 2005; Goodman, 2004; Mayberry et al., 2007), but post-adoption depression does appear to be relatively common: three studies identified in this review that assessed prevalence of depressive symptomatology provided rates of 8% (Dean et al., 1995), 15.4% (Senecky et al., 2009), and 32% (Gair, 1999) depending on the assessment instrument used. Yet, only one study examined potential explanatory variables (Gair, 1999). This study suggests that the experience of post-adoption depression maybe associated with some of the same child-/parenting-related variables that have been linked with depression among biological mothers (e.g., sleep deprivation, infant temperament, and child behavioral problems). Future research should provide a prospective examination of risk factors for psychological distress among both birth and adoptive parents, so that focus areas for preventive interventions may be identified.

Further, none of the research studies reviewed investigated the relationship between the demands of parenting (e.g., child behavioral problems, sleep deprivation) and facilitating factors (e.g., social support, personal hardiness) (Patterson & Garwick, 1994). Thus, the connections that can be made between the studies reviewed and family stress theory are limited. Future research should investigate the relationship between demands, facilitating factors, and the mental health of adoptive parents. If a relationship exists, it may be helpful in establishing criteria for identifying adoptive parents who are at an increased likelihood of experiencing mental health problems post-adoption.

We can provide little comment on the physical health or intimate partner relationship satisfaction of adoptive parents as only two studies identified for

this review examined these issues, respectively. The ability to comment on physical health outcomes is further limited in Gjerdingen and Froberg (1991) by the differential recruitment of adoptive parents versus biological parents and control groups: because biological parents and control women were recruited in a health care setting and adoptive parents were recruited through parenting-related sources, the sampling strategy maybe have introduced bias toward a healthier group of adoptive parents. More research is needed to examine the physical health problems and intimate partner relationship dynamics most commonly experienced by new adoptive parents.

The studies included in this review have some important methodological limitations that should be noted. The majority utilized small samples with limited diversity, focusing mostly on parents who identify as Anglo/European. Only two studies included a comparison group of biological parents (Dean et al., 1995; Gjerdingen & Froberg, 1991) and only one study included parents who identified as “gay” (McCarty et al., 1999). The literature search did yield studies investigating the transition to adoptive parenthood for people identifying as gay and/or lesbian (i.e., Goldberg, Downing, & Sauck, 2007; Goldberg & Smith, 2008; Ryan & Whitlock, 2008). However, none of these focused specifically on mental health, physical health, or intimate partner relationship satisfaction as outcome variables during the post-adoption period. Finally, to date, research has largely focused on adoptive mothers, to the exclusion of adoptive fathers. This is despite evidence that biological fathers also report significant levels of psychological distress in the first year following the birth of their child (Matthey, Barnett, Howie, & Kavanagh, 2003; Matthey, Barnett, Ungerer, & Waters, 2000; Zelkowitz & Milet, 2001).

This review indicates that additional research on the physical and psychological adaptation to parenthood among adoptive parents is warranted. As Atkinson and Gonet (2007) documented, many adoptive parents feel that “support” in the post-adoption period is valuable for them and their children. In order to develop effective support services that meet the needs of adoptive parents, we first need to understand their mental health, physical health, and relationship needs. Although adoption research has been criticized for its past dependence on adopted child to non-adopted child adjustment comparisons, there may be some merit in research comparing adoptive *parents* to biological *parents*, specifically in respect to their support needs. In most areas, it would appear that virtually all of the parenting support services are (implicitly at least) targeted toward biological parents (McKay & Ross, 2010). However, it is clear that the parenting experiences of biological and adoptive parents may be very different, and by extension, so might their primary concerns and support needs. For example, breastfeeding support is a significant need of many biological mothers that is not applicable to many adoptive parents; in contrast, adoptive parents may require support in disclosing adopted status to their child, a concern that is not applicable to biological parents. Research that directly compares the support needs and

adoptive and biological parents may provide strong evidence of the need for differential support services for these two groups of parents.

In addition, there are potentially important within-group comparisons to be made between adoptive parents based upon their specific adoption experiences (Forbes & Dziegielewski, 2003; Glidden & Floyd, 1997). This could include investigating whether there are differences in the health and support needs of parents based upon the child's characteristics (i.e., children with special needs versus children with no identified special needs). Further, research could investigate whether the type of adoption utilized (i.e., private domestic, public domestic, or international) impacts the health outcomes of adoptive parents. This could further be related to how the child's legal status (i.e., whether the adoption has been legally finalized) impacts upon the parents' experiences during the transition to adoptive parenthood.

It is difficult to identify the specific needs of adoptive parents based upon standardized assessments of health, mental health, and relationship satisfaction outcome variables that were developed with biological parents. Measures such as the PSI and the EPDS need to be validated with this demographic before they are widely used to assess the health needs of adoptive parents. Of interest is whether these are reliable measures to be using with adoptive parents or whether there are better ways to more accurately capture the unique experiences that adoptive parents encounter as they adapt to parenthood. Research investigating the psychometric properties of these instruments in samples of adoptive parents is needed. In addition, research is needed to determine the extent to which adoptive parents are willing to accurately report on sensitive issues such as their mental health or relationship status during the immediate post-placement period. Particularly if surveyed prior to the adoption being finalized, parents may not be forthcoming about these issues for fear that their responses may jeopardize their placement. This should be considered when determining the optimal window for data collection in this population.

Longitudinal assessment of relationship satisfaction, mental health, and physical health over time is also warranted, since data suggest that the initial transition to parenthood is stressful for the vast majority of new parents, biological or adoptive (Gjerdingen & Froberg, 1991; Petch & Halford, 2008). Longitudinal studies will shed light on how parents adjust over time and determine whether particular supports are needed at certain phases of the parenting transition.

Although limited, the studies identified in this review suggest that many adoptive parents do experience mental health problems that may complicate their transition to parenthood. Research among biological parents has identified a strong association between parental mental health and child mental health outcomes (Essex et al., 2006; Nomura, Wickramaratne, Warner, Mufson, & Weissman, 2002; Weissman et al., 2005). As early identification is

often associated with faster treatment and better prognosis, there is a need for adoption workers and health service providers to be alert for signs of physical health, mental health, or relationship problems during the post-adoption period in order to optimize the health of the entire adoptive family during this critical time.

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