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Longitudinal Analyses of Adoptive Parents' Expectations and Depressive Symptoms

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Abstract

Grounded in a theoretical model specific to adoptive parents, we examined the relationship between parental expectations and depressive symptoms across time. Assessments of 129 adoptive parents of 64 children were performed at three time points before and after placement of an adopted child with the family: 4–6 weeks pre-placement and 4–6 weeks and 5–6 months post-placement. Expectations were assessed in four dimensions: expectations of self as parents, of the child, of family and friends, and of society. Depressive symptoms were assessed with the Center for Epidemiologic Studies-Depression scale. Associations between parental expectations and depressive symptoms were analyzed, and longitudinal multilevel modeling was conducted to explore influences on expectations over time. Parental expectations changed from pre-to post-placement. With the exception of expectations of self as parent, adoptive parents' pre-adoption expectations were affirmed in the post-adoption time periods. In each expectation dimension, higher affirmation of expectations was correlated with decreased depressive symptoms before and after placement of a child. While parental expectations are not unique to adoptive parents, the essence and characteristics of certain expectations are unique to these parents. When working with adoptive parents, nurses who care for families should assess expectations both pre-and post-placement with awareness of their relationship to depressive symptoms.

Keywords

Depression; adoption; non-traditional families; adjustment to parenthood

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Conflict of Interest

The authors declare no conflict of interest.

Introduction

Expectations held by individuals are powerful psychological constructs that affect how we experience our world. Within a family context, expectations may be both precursors to and influences on subsequent behaviors. Married couples' prenatal expectations and their association with marital satisfaction differed by the type of expectation and by spousal role (Lawrence, Nysten, & Cobb, 2007). In another example, using the Expectancy-Value Theory of Achievement Motivation (Eccles & Wigfield, 2002), Kirby (2016) found that parental expectations predicted outcomes of young adult children with autism spectrum disorder.

In the context of adoption, parental expectations may originate from a variety of sources, including the competence and legitimacy of the adoptive parent, how the parent and child bond, and the well-being of the child. Thus, parental expectations of adoptive parents overlap with those of birth parents, but they may also differ because of the unique dynamics of the adoption process. For adoptive parents, expectations surrounding the placement of a child may be influenced by the parents' mental well-being, or in turn influence their mental status. Thus, the child's well-being may be affected (Goldberg & Smith, 2013; Pemberton et al., 2010; Tully, Iacono, & McGue, 2008).

In the current study, we built on the social construct of expectations and employed Foli's mid-range theory (Foli, 2010; Foli, South, & Lim, 2014) of parental post-adoption depression to examine changes in expectations from pre-to post-placement. We also analyzed the relationship between parental expectations and depressive symptoms across time. This study is relevant to family nursing because non-traditional families, such as adoptive families, require informed care based on the unique context of the adoption process and the integration of a new child over time.

Parents' Expectations

Expectations appear to be a universal construct for parents approaching either birth or adoption and are a link between parenting and depressive symptoms. In a metasynthesis of 18 qualitative studies across several disciplines (nursing, psychology, social work, and sociology), Beck (2002) found a significant role of expectations in postpartum depression. Myths of being the perfect mother created expectations that led to feelings of despair, conflict surrounding caring for the infant, feelings that were in opposition to what was expected (depressed instead of happy), and difficulty in coping with the demands of the infant. Four themes were: 1) conflicting expectations; 2) shattered dreams; 3) fear of moral condemnation/being labeled; and 4) cultural context (high expectations of dealing with motherhood from their country of origin; Beck, 2002).

The construct of expectations has been applied to adoptive parents in studies of the transition to parenthood and psychological symptoms (e.g., Levy-Shiff, Bar, Har-Even, 1990; Viana & Welsh, 2010). Levy-Shiff and colleagues (1990; 1991) proceeded with an assumption that adoptive parenting may be more difficult when compared to birth parenting, but they found that adoptive parents' expectations were not influential in the parents' psychological adjustment and functioning (Levy-Shiff et al., 1990). This study was, however, limited in that constructs of ego strength, ways of coping, and social support were only measured in

the “last stage of expectancy” (p. 258) and not through placement of the child. These constructs also were used as proxies for parental expectations (Levy-Shiff et al., 1990).

In subsequent work, Levy-Shiff et al. (Levy-Shiff, Goldshmidt, & Har-Even, 1991) directly measured adoptive parents’ expectations both pre- and post-placement and compared these with birth parents. A new variable, deprivation, also was measured. The authors described deprivation as including a sense of loss over infertility, the time between the revelation of infertility and adoption, and coping through denial and distancing in stressful situations. The latter aspect is colored by how the adoptive parents conceptualize the differences between themselves and birth parents. Overall, adoptive couples had more positive expectations than birth couples ($n=104$ adoptive and birth parents). In a model of transition to adoptive parenthood (i.e., postnatal adjustment), significant effects were seen of higher self-concept, social support, familial expectations, outside activities expectations, and lower depressive symptoms (Levy-Shiff et al., 1991).

We confirmed several of these findings using data from a sample of 300 adoptive mothers; nine explanatory variables accounted for approximately half of the variance in post-placement depressive symptoms (Foli, South, & Lim, 2012). These variables were expectations of themselves as mothers, the child, family and friends, feelings of being rested, self-esteem, history of depression, bonding with the child, marital satisfaction, and perceived support (Foli, South, & Lim, 2012).

Expectations specific to the child have been noted in additional work. In a study of adoptive mothers’ stress conducted by Viana and Welsh (2010), maternal expectations that focused on the child were assessed prior to adoption and 6 months post-placement. Four areas of (child) expectations were assessed: child health problems, developmental problems, behavioral/emotional problems, and child acceptance (by family and community). Higher expectations of child developmental and behavioral/emotional problems, along with higher depressive symptoms and a greater number of children in the family pre-adoption, were associated with higher parenting stress at 6 months post-placement. Interestingly, when assessed pre-placement, maternal higher expectations for child acceptance and higher perceived social support were related to lower parenting stress at 6 months post-adoption (Viana & Welsh, 2010). It would seem that expectations’ influence may vary, depending upon the imagined positive/negative outcomes.

Of course, parental expectations have both precursors and consequences, and it is important to understand how expectations fit into the larger dynamic of adoptive parents and their children. Parental expectations were examined as part of a larger model of parenting and child outcomes as measured by the National Survey of Adoptive Parents (NSAP, 2007) using structural equation modeling (Foli, Lim, South, & Sands, 2014). The adopted child’s need for special services and the child’s behaviors were direct determinants of parental expectations, while parental expectations were the direct determinants of parental aggravation and bonding (Foli, Lim, South, & Sands, 2014). Thus, parental expectations were deemed to be important mechanisms in the family system.

Adopting a child with known special needs is also unique to adoptive parents, and we assert that expectations are part of the decision-making process and subsequent parenting experience. Martin and Rosenhauer (2016) found that, from pre- to post-placement, mothers adopting children with special needs had more positive adjustment and less depression and anxiety when compared with mothers of children without special needs. Although expectations were not assessed, the authors speculated that these results may be explained by better preparation and more support.

Expectations and Parental Depression: Foli's Mid-Range Theory of Parental Post-Adoption Depression

The construct of individuals' expectations touches upon motivation, cognition, self-efficacy (Bandura, 1997), control, beliefs, interests, attributions, task value, self-regulation, and goals (Eccles & Wigfield, 2002). A placebo ingested to reduce pain is effective because the individual expected it to be (Flood, Lorence, Ding, McPherson, & Black, 1993). In the behavioral sciences, expectations are used as a construct of interest in multiple disciplines (e.g., Barbosa, Cunha, & Sallum, 2006; Capron, Norr, & Schmidt, 2013; Fieck, Berger, & Moore, 2002). Perhaps best known is Vroom's Expectancy Theory, a model related to motivation, especially when applied to the workplace (Vroom, 1964). Expectations are futuristic thinking, which are thought to depend on how strongly an outcome is wanted (valence), how valued the goal is to an individual (expectancy), and the effort it will take to achieve the goal (force; Vroom, 1964).

Depending upon the specific theory presented, emphasis on and the orientation of such constructs vary. Foli's mid-range theory of parental post-adoption depression uses several of the components of the Expectancy-Value Model (Eccles & Wigfield, 2002). In this model, the individual's expectations are personal and based on self-efficacy or belief in competence "in a given domain, in contrast to one's expectancies for success on a specific upcoming task" (Eccles & Wigfield, 2002, p. 119). Within the context of parenting, the personal value of performing well based on identity and self-schema, enjoyment of the activity, how the activity relates to present and future goals, and the costs associated with the activity play a part in the Expectancy-Value Model (Eccles & Wigfield, 2002) and in understanding depressive symptoms in adoptive parents.

Foli's (2010) mid-range theory of parental post-adoption depression was formed in a grounded theory study. The common theme of parental expectations was salient to depressive symptoms post-placement. Four dimensions were identified: expectations of themselves as parents; expectations of the adopted child; expectations of family and friends, and expectations of society (Foli, 2010). Each dimension for the adoptive parent is unique. Parents often hold high expectations of themselves as caregivers. These may be formed as they undergo the pre-adoption home study, comprised of multiple, and at times invasive, components (physical, financial, social). Expectations of the child may vary based on how much information is given to the prospective parents about the child, the parent's education and preparation, and whether the child's needs are known and understood. Instantaneous bonding between parent and child may be expected, whereas attachment and bonding develop with time.

Social support is reflected in the expectations of family and friends. With no outward signs of impending parenthood, such as pregnancy, family and friends may not fully appreciate adoptive parents' need for support surrounding placement, but parents often expect such support once the child is placed in the home. Clear motivation and contextualization of birth parents' decisions to relinquish the child may have been expected and framed in simplistic terms (e.g., lack of resources or maltreatment of the child); but this understanding of birth parent motivation becomes more salient and complex after placement, as may be the case in open adoptions. Last, parents may form expectations of how society will view them as a family. In particular, transracial/trans-ethnic parents may be startled to find that members of society encountered in schools and public places such as restaurants and shopping areas may not accept them as a family unit. Intrusive questions and negative non-verbal communication indicate that society's expectations of parents have not been met.

Foli (2010) concluded that the process of adoption contributed to the formation of expectations; if the parent subsequently experienced a disconnect between what was expected and what was realized (or affirmed), the parent was vulnerable to experiencing depressive symptoms. In subsequent studies, findings supported the theoretical relationship between expectations and depressive symptoms for both adoptive mothers and fathers (Foli, South, & Lim, 2012; Foli, South, Lim, & Hebdon, 2012a; 2012b).

The Current Study

Literature to date suggests a need for a prospective investigation of how adoptive parents' expectations, measured in key dimensions by multiple items, change across time, and of the role of expectations in the course of depressive symptoms in the first 6 months following placement of the adopted child.

In the current analysis, our research objectives were to: 1) describe how parental expectations change across time, from pre- to post-placement; 2) investigate correlations between parental expectations and depressive symptoms over time; and 3) analyze associations of those changes in expectations with additional variables through longitudinal multilevel modeling. This study was part of a larger investigation whose results are reported elsewhere (Foli, Hebdon, Lim, & South, 2017; Foli, South, Lim, & Hebdon, 2016; Foli, South, Lim, & Jarnecke, 2016).

Methods

Study Design

This was a longitudinal descriptive study with three data collection points. As the wait for an adopted child may extend from months to even years, our first data collection time point was intentionally close to the anticipated placement of the child (4–6 weeks; T1). Our second data collection was timed soon after placement (4–6 weeks; T2), when the parents were beginning to be aware of the child's needs and the integration of the child into the family. The last time point, at 5–6 months (T3), occurred after some time for stabilization of the family had taken place. These time points are in alignment with other studies of adoptive

parents (see Fields, Meuchel, Jaffe, Jha, & Payne, 2010: 0–4 weeks, 5–12 weeks, and 13–52 weeks; Senecky, et al., 2009: 8 weeks pre-placement and 6 weeks after adoption).

Recruitment of adoptive parents, the majority of whom were from the largest adoption agency in the country, was accomplished through electronic and hard copies of flyers distributed by adoption agency staff, advertisements placed in the adoption agency's quarterly magazine, and a webinar presented by one of the investigators on parental emotional health. Parents then contacted members of the research team through electronic mail or phone calls to enroll in the study.

This study was approved by the research team's two institutional review boards. Data were collected between February 2013 and December 2014. Data were collected via online surveys. Incentives were used to encourage participation (i.e., a gift card for completion of the survey at each time point). Consent documents were embedded in the electronic surveys for parents to review and acknowledge. Participants were assured of confidentiality of their responses, with an emphasis that adoption agency staff members would not have access to, nor be informed of, their responses.

Sample

Inclusion criteria were: Internet access; at least 21 years of age; the ability to speak, read, and understand English; and anticipated placement of the child within approximately 4–6 weeks after completion of pre-adoptive questionnaires. A total of 129 adoptive parents (2 singles; 1 homosexual couple; 9 married persons whose spouses did not participate, and 58 heterosexual married couples) of 64 children participated in this study, and 76% of them were enrolled through the largest adoption agency in the US (see Table 1). Almost half of parents ($n=56$) reported a history of infertility. In contrast to their parents (93% were White), only 27% of the children were White. Public, private, and international adoptions were reflected in the sample, but almost half of parents adopted children from another country. (The child's characteristics were collected from mothers' reports at T2. If the mother's report was not accessible, the father's report was used. If more than one child was adopted at the same time, the older child's characteristics were used.) One couple adopted three children, and five couples adopted two children at the same time.

Measures

Parents' and children's demographic measures were completed at T1¹ and T2, respectively. Sample characteristics collected were parent and child gender, parent and child age, parent and child race/ethnicity, income, education, history of infertility, level of being bothered by infertility, religion, level of religiosity, number of adopted children, the type of adoption (public, private, inter-country, and other), and whether the parent considered the child to have special needs (see Table 1). The remaining measures described below were completed by parents at all three time points.

¹For 13 parents, demographic variables were collected at T2.

Parental expectations—In our previous work, single-item measures of each dimension were collected, revealing significant positive relationships between the items and depressive symptoms (Foli, South, Lim, & Hebdon, 2012a; 2012b). Further refinement of the theoretical constructs measured in each dimension was undertaken (Foli, Lim, South, & Sands, 2014); therefore, in the current study, we used multiple investigator-generated items to measure changes in each dimension. The 20 items covered 4 domains of expectations: parents (6 items), child (5 items), family/friends (5 items), and society (4 items). For example, regarding expectations of the child, the item asked was, “I expect parenting this child will be easy” (Likert scale, ranging from 1=*very strongly disagree* to 7=*very strongly agree*; see Table 2).

The verbs used in these statements varied by time point. Future tense verbs, such as “will” and “will be,” were used at Time 1; present tense verbs were used at Time 2 and Time 3 to indicate affirmation of expectations. For example, in the parenting dimension, the statement at T1 was “I will be a good parent.” This was changed at T2 and T3 to “I am a good parent.” The concept of affirmed expectations is derived from comparisons of the changes in the expectation statements from pre-placement to the two post-placement time points. Cronbach’s alphas of expectation of parent, child, family/friends, and society for this study were .82, .68, .82, and .84 at T1, .82, .82, .81, and .82 at T2, and .77, .86, .82, and .84 at T3, respectively.

Center for Epidemiological Studies Depression Scale (CES-D)—The CES-D is a self-report scale that measures symptoms of depression in the general population (Radloff, 1977). Scores range from 0 to 60 with 20 items being rated on a 4-point scale (0–3). The CES-D has been widely used as a screening instrument with nonclinical populations. Cronbach’s alphas were .88 at T1, .92 at T2, and .90 at T3 for the current study. Depressive symptoms measured by the CES-D was analyzed as a continuous variable.

Statistical Analyses

Descriptive statistics for parent and child characteristics and expectation items were calculated using frequencies, means, and standard deviations. Each missing item of the CES-D was replaced by the item-median value if a respondent answered at least 80% of the items. For each dimension, we calculated expectation change scores by subtracting the score in expectations at T1 from the affirmation score of those expectations at post-placement; thus, scores were calculated by subtracting the T1 expectation score from the affirmation score at T2, at T1 from T3, and at T2 from T3. Positive change scores indicated that expectations were affirmed, while negative scores indicated that expectations were unmet.

To investigate the association between parental expectations and depression measured by the CES-D, Pearson’s correlations were calculated at each time point. In addition, the mixed model approach (Lam, Webb, O’Donnell, 1999) using maximum likelihood estimation was used to estimate the correlation between depression and each expectation dimension to examine the stability of expectation dimension scores over time, accounting for correlated partner-level data. Parent characteristics at baseline and child variables at T2 (see Table 1 for the variables analyzed) were also included in the multilevel model. Only significant

covariates were kept in the final model by the backward selection method. Tukey's post-hoc test was used to control for multiple comparisons. All of the analyses were done in SAS 9.4 (SAS institute, 2013) and $p < .05$ was considered statistically significant.

Results

Changes in Parental Expectations and Depressive Symptoms Over Time

"Parenting my child will be easy" had the lowest mean for all items at all time points. The highest means were found for "My child will be/is a positive addition to our family" (Table 2). Expectation dimensions, depressive symptoms (CES-D score), and change scores between time points were calculated (Table 3 and Figure 1).

The only dimension in which expectations were not affirmed (i.e., the pre-placement expectations were higher than ratings on subsequent experiences) was in the dimension of self/parent. These expectation scores declined with time, indicating that parents' expectations of themselves were not met or affirmed after the child was placed. Three items with lower mean scores post-placement were "I am a good parent," "I am patient with my child," and "I have enough energy to give to my child" (Table 2). All other dimension scores (child, family/friend, and society) increased with each time point, signifying that expectations were affirmed after the child was in the home. Parental depressive symptoms (CES-D scores) also decreased over time, resulting in negative score changes; however, none were statistically significant (Table 3).

Correlations of Expectation Dimensions and Depressive Symptoms over Time

The percentage of parents who screened above the threshold for depressive symptoms (CES-D 16) was highest immediately after placement of the child: 9.5% (in $n=116$) at T1; 11.3% (in $n=115$) at T2; and 9.6% (in $n=104$) at T3 (see Foli, South, Lim, & Hebdon, 2016). Significant negative correlations were found between each dimension of expectations (parent, child, family and society) and depressive symptoms, indicating that as expectation scores increased, depressive symptoms decreased (Table 4). Parent and family/friend expectations were significantly negatively correlated with depression at all three time points. Expectations of the child and society were not significantly correlated with depressive symptoms at pre-placement, but child expectations were significantly negatively correlated with depression at T2 and T3. Similarly, by T3, there was a significant negative correlation between expectations of society and depressive symptoms.

Predictors of Expectation Dimensions

Longitudinal multilevel modeling revealed significant effects of demographic variables by time across the four dimensions. As noted, parental expectations changed across time, with expectations of self as parent decreasing across time (see also Figure 1). Type of adoption was a significant predictor of all parental expectations. The parents of internationally adopted children had lower scores on the expectation items at all three time points than parents who used public domestic, private domestic, or other adoption services. Expectations of the child also were predicted by whether the parent was bothered by infertility and by the child's age. In the dimension of expectations of family and friends, infertility was a

significant predictor. Expectations of society were also associated with infertility and parent's age (see Table 5). Parent gender was not a significant predictor of expectations.

Discussion

We examined parental expectations from pre-to post-placement of adoptive children in relation to depressive symptoms. Our findings suggest that as described in Foli's parental post-adoption depression theory (Foli, 2010), parental expectations have important implications for the mental health of adoptive parents. This study is unique in that expectations first measured at T1 then were measured as met/affirmed or unmet expectations at T2 and T3. Higher expectations at pre-placement and higher scores on experiences at post-placement were linked to lower levels of depressive symptoms. Further, expectations held by adoptive parents prior to placement of the child were different from experiences reported in the immediate and 6 month periods post-placement, and these changes through time are important. With the exception of expectations of self as parent, adoptive parents were able to affirm their expectations in the post-adoption time points.

Expectations of Self as Parent

The domain of expectations of the self as parent included parents' beliefs about their preparation to adopt the child, the evaluation of being a good parent, patience with the child, energy to give to the child, parent-to-child bonding, and financial resources. These expectations were highest pre-placement and decreased at both T2 and T3, the only dimension to demonstrate such a pattern. One interpretation of these data is that there is indeed a "super-parent" persona created by prospective adoptive parents as they undergo the adoptive process (Bond, 1995; Foli, 2010). The pressure to pass the home study, background checks, and medical fitness test may contribute to parental expectations of being the perfect parents to their children, an expectation that is unmet when the child arrives. The changes between T1 and T2, and T1 and T3 were statistically significant, reflecting parents' inability to affirm previous expectations of themselves related to bonding, patience, energy, resources, and so forth.

We did not find any parent gender differences in expectations; others found that birth parent expectations differed by marital roles. Husbands perceived their experiences as a new parent more negatively than their wives and had expected less positive experiences than their wives (Lawrence et al., 2007). We believe that unlike some birth parents, the purposeful nature of adoptive parenting and the non-gendered nature of these specific expectations may account for this lack of difference in our findings between mothers/wives and fathers/husbands.

In the current study, there were significant negative correlations between expectations of self as parent and depressive symptoms, but as these expectations decreased across time, depressive symptoms also decreased. Parenting expectations were lowest for parents who were adopting a child from another country. Psychological deprivation, emotional neglect, and lack of proper nutrition may increase challenges faced by adoptive parents for some children adopted from other countries (Lee & Sagor, 2014).

Expectations of the Child

In contrast to the expectations of self as parent, child expectation scores increased across time. This dimension reflected perceptions of how easy the child has been to parent, the child's bonding with parents, the child's needs, integration into the family, and pre-adoption information received. With the exception of pre-placement (T1), child expectation scores were negatively correlated with depressive symptoms. Child expectations were less likely to match subsequent experiences for parents who were bothered by infertility and by those who were adopting an older child. The goals of parenting versus pregnancy should be discussed with potential adoptive parents so that expectations may align with real experiences.

Affirmed expectations also appeared to be lower as the child's age increased. We can compare our findings to those from a small cohort of nine families who had pursued special needs adoption through the child welfare system (Denby, Alford, & Ayala, 2011). Older children who are in the foster care system are frequently classified as special needs, and the average age of the children was 7.8 years. Researchers described three themes related to expectations: expectations derived from previous experiences, what would be considered the best match for their family, and the potential behavior of the child. Many of these parents had previous experience as foster parents and knew what was realistic to expect – or not expect – from the children (Denby et al., 2011). In the current study, only 11% of the parents adopted children from the public welfare (foster care) system. Therefore, the parents in our sample who adopted through domestic private or intercountry paths may not have had exposure to the child's behaviors (i.e., able to spend time with the child or obtain complete background information) prior to placement, as would be more common in the parents described by Denby and colleagues (2011).

Pre-adoptive training may account for the lower child expectations of parents who pursued intercountry adoptions. Parents who are adopting a child from another country are affected by the Hague Convention on the Protection of Children and Co-operation in Respect of Intercountry Adoption (Hague Convention) adopted in 2008 that requires pre-adoptive training, including education related to the needs of the child. The majority of the parents in this sample were recruited from an adoption agency that required pre-adoption training. Thus, the parents may have been exposed to information that would prepare them for the unique needs of adoptive children, particularly those adopted from other countries. Additional hypothesized explanations for this finding may be that the parents expect their child to have a different cultural background and to face language challenges.

Expectations of Family and Friends

As with the child dimension, expectations of family and friends, including reactions to the adoption, understanding why the parent wanted to adopt, understanding the child's needs and behaviors, the treatment of the child as a family member, and the parents appreciating the rationale of the birth parents' release of the child significantly changed over time, and expectations were affirmed at T2 and T3 with the largest change from T1 to T3. Significant negative correlations with depressive symptoms were also found at all three time points, and in multilevel modeling, lower family and friends expectations were reported by parents who had experienced infertility than those who had not. These findings may be explained by the

how family and friends integrate placement of a non-birth child and understand the rationale for couples who choose to become adoptive parents. Further research is needed to elucidate this finding.

Unlike those individuals and couples who experience pregnancies, adoptive parents have few, if any, overt signs of impending parenthood. Therefore, support from family and friends may be lacking prior to placement of the child but increase once the child is in the home. In addition, parents may request that friends and family wait until the child is placed in the home to provide support, especially when adoptive parents previously have been faced with adoptions that fail when a birth parent changes the decision before adoption is finalized.

Expectations of Society

Again, expectations for acceptance of the adoptive family, respect for family boundaries, support available to the family, and societal treatment of the child as a member of the family were significantly different at each time point, with increases at T2 and T3. The largest increase was found between pre-placement (T1) and 5–6 months post-adoption (T3). Societal expectations were inversely correlated with CES-D scores at T3. In multilevel modeling, parents who had adopted a child from abroad, were younger, or had experienced infertility had lower societal expectations. Infertility is common among adoptive parents, and the impact of infertility appears to be an individualized phenomenon. Forty-five percent of the current sample struggled with infertility, with an average rating of 2.5 on a scale of 1 to 5 of being bothered by it. Mott et al. (2011) found that how much infertility mattered to the parent was significantly associated with depressive symptoms in adoptive mothers. Further research is needed to understand the influences of societal expectations related to procreation/fertility and any generational differences.

Limitations

The limitations of the study include the homogeneous sample and relatively modest sample size. The majority of the sample was recruited from a large adoption agency whose mission included a Christian focus. Clients of this agency may employ spirituality as a buffer to risks for depressive symptoms. We used an investigator-generated tool to measure expectations; future research is needed to explore the psychometric properties of these items. The clinical implications of the study are limited by the demographic profile of the adoptive parents, the majority of whom were White, educated, and higher socioeconomic status. Yet 65% became transracial families and 44% adopted a child with special needs, both of which may present challenges post-placement. Thus, future research should include a heterogeneous and larger sample of parents to replicate our findings. Strengths of the study include the privacy of the online survey, which may enhance candid reports, obtaining data from both mothers and fathers, and the longitudinal design.

Conclusions

Expectations of adoptive parents prior to placement of the child are different from real experiences measured post-placement. With the exception of expectations of self as parent, adoptive parents were able to affirm their expectations post-adoption. While parental

expectations are not unique to adoptive parents, we conclude that the essence and characteristics of certain expectations are distinctive to this population. For example, introducing an older child into the family, integrating a child with a history of maltreatment and/or special needs, understanding the decisions made by birth parents, how the parent makes sense of infertility, and the adoption process itself create singular experiences of adoptive parents. These family dynamics create expectations that when unmet or unrealistic are related across time to parental depressive symptoms. The inverse dynamic should also be considered: depressive symptoms may influence how expectations are created and met or not met.

Training for prospective adoptive parents may provide more realistic expectations of themselves as parents and of the child. When working with parents, nurses who care for families should assess expectations both pre-and post-placement. When the child is the focus of care, parental needs may be overlooked. Nurses caring for families in primary and acute settings need to be aware of how adoptive parents' experiences are both similar and different from those of birth parents. Nurses who are knowledgeable about parental expectations and the link to depressive symptoms when unrealistic or unmet will be better able to deliver care to these families.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1. Changes in Parental Expectations over Time

* $p < .05$; ** $p < .01$; *** $p < .001$ (different from zero)

Table 1

Subject Characteristics

Parent Variable ^a	n (%)	Child Variable ^b	n (%)
Gender		Gender	
Male	59 (46)	Male	32 (50)
Female	70 (54)	Female	32 (50)
Race/Ethnicity		Child's Race/Ethnicity	
Caucasian or White	120 (93)	White or Caucasian	17 (27)
Other	9 (7)	Black or African	12 (19)
Income		Asian or Pacific Islander	22 (35)
Under \$75,000	42 (34)	Other	11 (2)
\$75,000 to under \$100,000	38 (30)	Transracial Family	
More than \$100,000	45 (36)	No (same as one of parents)	24 (35)
Education		Yes (different from both parents)	38 (65)
Less than four year college graduate	23 (18)	Special Need	
Four-year college graduate	56 (43)	Yes	28 (44)
Post-graduate	50 (39)	No	34 (55)
Job Status		Type of Adoption	
Full time	85 (66)	Public (domestic)	7 (11)
Part time	14 (11)	Private (domestic)	20 (32)
Other	30 (23)	Inter-country	29 (47)
Infertility		Other	6 (10)
Yes	56 (45)		
No	68 (55)		
Religion			
Protestant	56 (43)		
Roman Catholic	15 (12)		
Non-denominational Christian	45 (35)		
Other	13 (10)		
	<i>M (SD)</i>		<i>M (SD)</i>
Parent Age (years)	38.1 (5.3)	Age (months)	28.1 (38.3)
Bothered by infertility ^c	2.5 (1.2)	Length of Waiting Time (mos.)	10.7 (11.5)
Level of Religiosity ^d	6.1 (1.2)		

Notes:

^a n=129 parents.^b n=64 couples/singles;^c Scored from 1 (*strongly disagree*) to 5 (*strongly agree*).^d Scored from 1 (not at all religious) to 7 (very strongly religious).

Table 2

Scores on Parental Expectation Items by Dimension

	Time 1	Time 2	Time 3
<i>Parent</i>	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>
I am prepared to adopt this child.	6.3 ± 0.8	6.2 ± 1.0	6.0 ± 1.0
I am a good parent.	6.2 ± 0.7	5.9 ± 0.8	5.8 ± 0.8
I am patient with my child.	5.9 ± 0.8	5.6 ± 0.8	5.4 ± 0.8
I have enough energy to give to my child.	5.9 ± 0.8	5.5 ± 0.9	5.3 ± 0.9
I am able to bond with my child.	6.2 ± 0.8	6.2 ± 0.9	6.2 ± 0.9
I have the financial resources to take care of my child.	6.1 ± 0.8	6.0 ± 0.8	6.0 ± 0.8
<i>Child</i>			
Parenting my child is easy.	3.4 ± 1.0	4.3 ± 1.3	4.1 ± 1.2
My child has bonded with me.	5.3 ± 0.9	5.7 ± 1.2	5.9 ± 1.2
My child's needs are manageable.	5.3 ± 0.9	5.8 ± 0.9	5.9 ± 1.0
My child is a positive addition to our family.	6.3 ± 0.9	6.4 ± 0.9	6.4 ± 1.0
I received the information I needed about my child.	5.3 ± 1.0	5.5 ± 1.1	5.5 ± 1.4
<i>Family and Friends</i>			
My family and friends responded to my adopting a child in the way I expected them to.	5.5 ± 1.1	6.1 ± 0.9	6.0 ± 0.9
My family and friends understand my/our motivation to build our family through adoption.	5.8 ± 1.0	5.9 ± 1.1	5.9 ± 1.1
My family and friends understand our child's needs and behaviors.	5.0 ± 1.1	5.2 ± 1.1	5.4 ± 1.3
My family and friends treat our child as any other member of the family.	5.9 ± 1.0	6.1 ± 1.0	6.3 ± 0.9
I understand the birth parents' reasons to gift their child to us.	5.2 ± 1.4	5.4 ± 1.4	5.5 ± 1.4
<i>Society</i>			
Society accepts us as an adoptive family.	5.2 ± 1.0	5.7 ± 1.0	5.7 ± 1.0
Society respects our boundaries as a family when we are in public.	4.4 ± 1.2	5.2 ± 1.2	5.4 ± 1.1
There are societal sources of support for us as an adoptive family.	5.3 ± 0.9	5.4 ± 1.1	5.2 ± 1.0
Society treats our adoptive child as any other member of our family.	4.8 ± 1.2	5.3 ± 1.2	5.5 ± 1.3

Notes: Likert scale, ranging from 1=*very strongly disagree* to 7=*very strongly agree*. The verbs used in these statements varied by time point. For example, future tense verbs, such as “will” and “will be” were used at Time 1 (expectations); present tense verbs, were used at Time 2 and Time 3 (affirmation of expectations).

Table 3
Mean, Standard Deviation, and Change Scores of Expectation Dimension and Depression by Time

Time	Expectation Dimension				Depression (CES-D) <i>M</i> $\pm$ <i>SD</i>
	Parent <i>M</i> $\pm$ <i>SD</i>	Child <i>M</i> $\pm$ <i>SD</i>	Family <i>M</i> $\pm$ <i>SD</i>	Society <i>M</i> $\pm$ <i>SD</i>	
Time 1	36.49 $\pm$ 3.34	25.57 $\pm$ 3.04	27.50 $\pm$ 4.21	19.67 $\pm$ 3.55	6.59 $\pm$ 6.23
Time 2	35.62 $\pm$ 3.69	27.76 $\pm$ 3.97	28.81 $\pm$ 4.14	21.54 $\pm$ 3.57	6.35 $\pm$ 7.47
Time 3	34.73 $\pm$ 3.92	27.79 $\pm$ 4.65	29.04 $\pm$ 4.33	21.77 $\pm$ 3.58	6.06 $\pm$ 6.86
Change Scores					
Time 2 – Time 1	–1.04 $\pm$ 3.09 **	2.04 $\pm$ 4.12 ***	1.23 $\pm$ 3.49 ***	1.61 $\pm$ 2.99 ***	–0.08 $\pm$ 7.11
Time 3 – Time 1	–1.88 $\pm$ 4.17 ***	2.19 $\pm$ 5.00 ***	1.66 $\pm$ 3.81 ***	2.31 $\pm$ 3.34 ***	–0.12 $\pm$ 7.00
Time 3 – Time 2	–0.59 $\pm$ 3.12	0.20 $\pm$ 3.63	0.55 $\pm$ 2.82	0.34 $\pm$ 2.40	–0.43 $\pm$ 6.90

Notes: CES-D=Center for Epidemiological Studies-Depression; parents' gender was not significant. Change scores are the difference between expectations held pre-placement (Time 1) and the affirmed expectations post-placement (Time 2 and Time 3), and between the affirmed expectations immediately after placement and 5–6 months after placement (Time 2 and Time 3). Significance of change score = significantly different from zero.

**
 $p < .01$

 $p < .001$

Table 4

Correlation between Expectation Dimensions and Depression over Time

Depression by Time	Expectations of:			
	Parent	Child	Family/Friends	Society
CES-D Mean Across Time	-.46 ***	-.42 ***	-.35 ***	-.19 **
CES-D Time 1	-.28 **	-.18	-.24 *	-.12
CES-D Time 2	-.55 ***	-.52 ***	-.41 ***	-.15
CES-D Time 3	-.55 ***	-.46 ***	-.40 ***	-.26 **

Notes: CES-D=Center for Epidemiological Studies Depression Scale.

*
p<.05

**
p<.01

p<.001

Table 5

Predictors of Parental Expectation Dimensions in Multilevel Modeling

	Expectations Dimension (Estimate [SE])			
	Parent	Child	Family/Friend	Society
Intercept	37.71 (0.74) ***	28.93 (0.99) ***	28.94 (0.89) ***	18.24 (2.07) ***
Time 1	Ref	Ref	Ref	Ref
Time 2	-1.05 (0.34) **	2.22 (0.43) ***	1.33 (0.36) ***	1.82 (0.32) ***
Time 3	-1.79 (0.36) ***	2.67 (0.45) ***	1.79 (0.37) ***	2.15 (0.33) ***
Parent's age (years)				0.10 (0.05) *
Infertility: No			Ref	Ref
Infertility: Yes			-2.07 (0.65) **	-2.49 (0.59) *
Whether parent is bothered by infertility		-0.54 (0.22) *		
Type of adoption: Public domestic	Ref	Ref	Ref	Ref
Private domestic	-0.14 (0.87)	-0.18 (0.83)	1.59 (0.98)	-0.30 (0.88)
Inter-country	-2.43 (0.82) **	-2.61 (0.82) **	-1.88 (0.93) *	-1.88 (0.84) *
Other	1.38 (1.18)	0.51 (1.10)	2.30 (1.42)	1.06 (1.30)
Adopted child's age ^a (months)		-0.03 (0.01) **		

Note. SE=standard error.

^a If more than one child was adopted at the same time, the older child's characteristics were used.

*
 $p < .05$

**
 $p < .01$

 $p < .001$