

A comparison of parenting stress and children's internalising, externalising and attachment-related behaviour difficulties in UK adoptive and non-adoptive families

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Abstract

This study aimed to increase understanding of the impact of the parenting task in a representative sample of adoptive and non-adoptive parents in the UK. Cross-sectional data from two UK samples were collected: (1) 86 adoptive parents and (2) 167 biological parents, of children aged 3–11 years. Parenting stress and parent-reported child internalising, externalising and attachment-related behaviour difficulties were assessed via online questionnaires. Data were analysed using descriptive statistics, correlation and analysis of covariance. Compared with their biological counterparts, adoptive parents described higher parenting stress, which was explained by their reports of greater child difficulties, including attachment-related problems. The same was found for biological parents but with lower levels of stress and child difficulties. Thus, the unique nature of the adoptive parenting task indicates that parenting stress should be considered a risk factor when difficulties are present in adoptive families. Furthermore, service thresholds may be better informed by this understanding, particularly as this study found that while just under half of children had high levels of difficulties, under one-third of parents reported receiving services.

Keywords

Parenting stress, adoption, attachment, internalising, externalising

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Introduction

While over half of British parents report difficulty coping with the strains of parenting (Ghate and Hazel, 2002), it is notable that little attention has been paid in the literature to the psychological impact of parenting later adopted children (adopted aged one year or older). Later adoption is most typical of adoptions in the UK where the average age of adoption is three years and eight months (Department for Education, 2013). In biological families, certain factors have been linked with parenting stress, defined here as the experience of psychological distress linked to parenting a particular child (Abidin, 1995). In biological families parenting stress has been associated with children's internalising (e.g. anxiety) and/or externalising (e.g. defiance) problems (Anthony, et al., 2005) and with children having conditions such as cerebral palsy (Park, et al., 2012) or heart disease (Uzark and Jones, 2003). Biological mothers of infants with insecure attachment styles have reported higher levels of parenting stress than mothers of children with secure attachment styles (Emery, Paquette and Bigras, 2008). Children with insecure attachment styles show more negative affective behaviours towards their biological mothers, such as irritability and aggression; in response, mothers have reported feeling lower in mood and less capable to parent (Teti, et al., 1991).

A meta-analysis of 66 studies concluded that adoptive children have significantly higher levels of emotional and behavioural difficulty than biological children, particularly with regard to externalising behaviour problems (mean effect size .72 – Wierzbicki, 1993) and later adopted children are more likely to demonstrate insecure attachment behaviours than their biological peers (van den Dries, et al., 2009). There are additional conditions increasingly recognised in adoptive populations, such as foetal alcohol spectrum disorders (Phillips, 2015), that may place additional burden on parents (Brown, 2015). Therefore it may be argued that the adoptive parents of late adopted children with an increased risk of psychopathology, including higher risk of emotional and behavioural difficulties and insecurity of attachment (van den Dries, et al., 2009), will constitute a population particularly vulnerable to parenting stress.

Despite the potentially high level of need that these studies identify, a clinical audit has found that families referred to child mental health services in the UK for support regarding looked after and adopted children have struggled to access help due to the children not meeting criteria for formal diagnoses of 'mental illness' (Rao, Ali and Vostanis, 2010). Alongside a lack of professional agreement regarding when 'attachment difficulties' require clinical intervention and difficulty measuring attachment-related presenting problems in real-life clinical settings, the extent and impact of this unmet psychological need on adoptive families is as yet unknown (Ratnayake, Bowlay-Williams and Vostanis, 2014). The few studies that have been conducted have found familiar concerns. For example, parents of children adopted post-infancy with backgrounds of maltreatment have reported higher levels of parenting stress (Palacios and Sánchez-Sandoval, 2005) and an increased risk of post-adoption parental mental health problems (McKay, Ross and Goldberg, 2010) which, at worst, can put adoptive families at risk of breakdown, although the age at adoption remains the greatest risk factor for this (see Selwyn, Wijedasa and Meakings, 2014). There may be unique factors in adoption that can contribute to parenting stress, such as pre-placement circumstances (e.g. the impact of infertility treatment) and post-placement factors such as life events and post-adoption depression (e.g. Payne, et al., 2010). The emergence of the Adoption Support Fund in England since May 2015, which has enabled families to receive

interventions provided they are listed and available given the variation in service provision, brings to bear an emphasis on understanding critical elements in adoptive families that may need targeted intervention.

To date, parenting stress research with adoptive families has been dominated by international adoption samples, less typical of the wider UK adoptive community whose children are more likely to have backgrounds of maltreatment and to have been adopted post-infancy from statutory care (see Department for Education, 2013). Furthermore, to our knowledge there have been no direct comparisons with biological counterparts which, we argue, would be helpful in developing our understanding of the unique needs of UK adoptive families.

Recent theoretical developments (e.g. Hughes and Baylin, 2012) emphasise the impact of stress on parenting at a neurobiological level and point to the importance of addressing parenting stress alongside interventions targeted to the child's presenting difficulties. The model of 'blocked care' (Hughes and Baylin, 2012) helps to specify the origin of the stress for the parent and the impact this can have on five interacting systems of parenting, including a sense of reward in the relationship and the ability to regulate strong, defensive responses. This model can give clinicians a clear guide when working with families as to the origin of the stress for the parent, including childhood adversity (referred to as chronic blocked care) or related to the child's difficulties specifically (termed child-specific blocked care), and therefore indicates where and when to target the intervention; for example, psychological treatment for unresolved childhood abuse (in the case of chronic blocked care) or support for significant life events (in the case of acute blocked care). In this way, child-specific blocked care would be predicted by this model as being likely to occur in adoptive populations where difficulties for the child are more prevalent than other populations. Indeed, as clinical levels of parenting stress have negative effects on parents and children, in biological parents they can also moderate the success of parenting interventions (Deater-Deckard, 2005), which will have relevance for therapeutic services working with adoption.

In the absence of studies of parenting stress in adoption in a sample typical of the UK adoptive community, we sought to investigate the levels of parenting stress, internalising, externalising and attachment-related behavioural difficulties and their interactions in adoptive and biological parents to determine the extent of these needs. We hypothesised that when compared with their biological counterparts, adoptive parents would report more of these child difficulties and this would be associated with reports of higher parenting stress.

Method

Participants

Participants comprised 86 adoptive parents and 167 biological parents of children aged 3–11 years. This range was chosen given the normative population of some of the measures used. There were 48 girls (56%) in the adoptive group and 83 girls (50%) in the biological one. The mean child age was seven years ($SD = 2.42$, range 3–11) in the adoptive group and six years ($SD = 2.34$, range 3–11) in the biological group. The mean age of adoptive parents was 42 years ($SD = 5.56$, range 29–53) and 37 years ($SD = 6.10$, range 22–52) for biological parents. The majority of parents were mothers (95% adoptive, $n = 82$; 98% biological, $n = 164$), White British (88% adoptive, $n = 76$; 89% biological, $n = 149$), heterosexual (92% adoptive, $n = 79$; 95% biological, $n = 159$) and with higher education qualifications (71% adoptive, $n = 61$; 65% biological, $n = 108$). Most were married or in civil partnerships (76% adoptive,

n = 65; 78% biological, n = 131). Gross household annual incomes ranged from less than £10,000 to over £81,000 per annum.

In the adoptive group, 27 parents (31%) reported current involvement of mental health or psychology services, compared with 8 (5%) in the biological group. The adoptive group was representative of British adoption (Department for Education, 2013) in that the vast majority of adoptions were domestic (99%, n = 85), most adopted children had entered local authority care due to neglect (55%, n = 47) or abuse (24%, n = 21) and mean child age at adoption was four years (SD = 2.24, range 1–9). Adoptions had occurred on average four years prior to the study (SD = 2.27, range 6 months to 10 years). In the adoptive group, reasons for adoption were: 21 abuse, 47 neglect and 18 ‘other’ (e.g. unwanted pregnancy, death or illness of biological parents).

Participants were recruited via online advertisements in mainstream and adoption-specific parenting forums (e.g. the British online parenting magazine *Mumsnet*) and were offered prize draw entry to win shopping vouchers. The project was approved by the Oxford Central University Research Ethics Committee.

Procedures

Participants accessed the study information document and questionnaires via hyperlinks in advertisements. Parents were eligible to participate if they had a child who (a) was aged 3–11 years, (b) was their biological child or had been their adopted child for a minimum of six months, and (c) had no major physical illness, learning disability or developmental disorder. Parents with more than one child within the criteria were instructed to take part with reference to their child closest in age to 6.5 years (median of age range). After giving informed consent, participants first provided demographic information, details of family circumstances and the target child; they then completed the measures in the order described below. This was part of a larger study and additional measures were completed which are not reported here. All measures were filled in online. The psychometric properties of questionnaires are not lost in translation to the internet, and the benefits of online surveys include diminished experimenter effects and true participant anonymity (Denissen, Neumann and van Zalk, 2010; Jones, et al., 2008).

Measures

Parenting stress. The Parenting Stress Index-Short Form (PSI-SF – Abidin, 1995) is a 36-item measure with four scales: (a) parental distress, (b) parent–child dysfunctional interaction, (c) difficult child and (d) a defensive responding scale to screen for social desirability effects. Total possible scores range from 36 to 180, with higher scores indicating greater parenting stress. The PSI-SF retains its reliable and valid psychometric profile when used with adoptive parents (Farr, Forssell and Patterson, 2010).

Internalising and externalising difficulties. Children’s behaviour was assessed using the Strengths and Difficulties Questionnaire (SDQ – Goodman, 1997), a 25-item parent-report measure suitable for detecting difficulties in children aged 3–16 years across diverse populations (Achenbach, et al., 2008). The SDQ assesses four areas (emotional symptoms, conduct problems, hyperactivity and peer problems) using a three-point scale. Scores are summed and higher scores indicate more internalising (emotional symptoms and peer problems) and

externalising (conduct problems and hyperactivity) behaviours. SDQ scores have been validated against children's clinically observed behaviour (e.g. Goodman and Goodman, 2009; Goodman and Scott, 1999).

Attachment-related behaviour difficulties. The Expression of Feelings in Relationships questionnaire (EFR) is a 30-item, parent-report measure of child social/emotional and behavioural problems experienced within the parent-child relationship (Quinton, et al., 1998). It is not intended to be a formal measure of attachment organisation or style, rather it was designed to 'indicate the presence or absence of behaviours that might derive from prior poor attachment experiences and inhibit the development of new attached relationships' (Rushton, et al., 2003: 391). The questionnaire builds a profile of social/emotional behaviours suggestive of attachment-related problems, including difficulties in seeking and accepting comfort appropriately (e.g. 'Hides any fears'), being close with the caregiver (e.g. 'Does not like to be hugged'); appropriately discriminating between primary caregivers and others (e.g. 'More friendly with strangers than we would like'), regulating emotions (e.g. 'Loses temper very quickly, easily flips into anger') and in engaging in genuine, socially appropriate interactions (e.g. 'Gives fantastical accounts of self or abilities'), using a three-point scale. Total scores range from nought to 60; higher total scores indicate more attachment-related behaviour difficulties. The EFR achieved good discriminative validity between UK adoptive and biological populations (Quinton, et al., 1998) and good construct validity, internal reliability and internal validity regarding children aged 3-12 years (Granger, 2008).

Results

Preliminary analyses

The online questionnaire was accessed by 280 participants. Exclusions constituted 27 cases of survey break off or insufficient data, and 10 participants (two adoptive) with significant PSI-SF defensive responding scale scores.

Internal reliability was high for the PSI-SF (Cronbach's $\alpha = 0.95$) and EFR (Cronbach's $\alpha = 0.91$). All continuous variables except parent age and positive/neutral overall valence were non-normally distributed. However, as long as there are at least 20 degrees of freedom for error, the *F*-test is robust against violations of the normality assumption (Tabachnick and Fidell, 2007). Parametric and non-parametric correlations yielded the precise same pattern of findings. Parametric correlations are reported for ease of interpretation.

The adopted children were older than the biological children ($t(251) = 3.17, p = .002$). Adoptive parents were older than biological ones ($t(251) = 6.11, p = .000$). There were no other significant between-group differences with respect to parent/child gender, parent/child ethnicity, parental education, relationship status, sexual orientation, gross annual household income and numbers of children in households ($\chi^2 \leq 4.28$).

In the sample as a whole, PSI-SF scores were positively correlated with SDQ Total Difficulties scores ($r(251) = .69, p = .000$) and EFR total scores ($p(251) = .78, p = .000$). Reasons for adoption were unrelated to scores for SDQ, PSI-SF and EFR ($F_s < 2.24$).

Descriptive statistics

Mean scores and standard deviations for both adoptive and biological groups can be viewed in Table 1. The mean scores of the adoptive group were higher on all measures.

Table 1. Mean scores for parenting stress and child behaviour difficulties by adoption status.

	<i>Adoptive (n = 87)</i>	<i>Biological (n = 167)</i>
Child internalising behaviours (SDQ)	8.58 (3.26)*	6.62 (2.45)
Child externalising behaviours (SDQ)	10.62 (4.60)	6.05 (3.95)
Attachment-related behaviour difficulties (EFR)	27.58 (11.15)	14.49 (6.79)
Parenting stress (PSI-SF)	102.60 (25.78)	80.09 (19.35)

*Standard deviations are shown in parentheses.

Table 2. Summary of categorical scores.

<i>Measure</i>	<i>category</i>	<i>Adoptive group (n = 86)</i>		<i>Biological group (n = 167)</i>	
		<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
PSI-SF	<i>Very low stress (<15th percentile)</i>	1	1%	16	10%
	<i>Low average stress (16th–50th percentile)</i>	8	9%	41	25%
	<i>High average stress (51st–84th percentile)</i>	17	20%	48	29%
	<i>Very high stress (>85th percentile)</i>	60	70%	62	37%
SDQ	<i>Normal (total scores 0–13)</i>	29	34%	128	77%
	<i>Borderline (total scores 14–16)</i>	15	17%	22	13%
	<i>Abnormal (total scores 17–40)</i>	42	49%	17	10%

Table 2 shows categorical score data from biological and adoptive groups on the measures PSI-SF and SDQ, for which normative data were available. The biological parents' mean PSI-SF score was nine points higher and the figure for the adoptive parents was 30 points higher than the standardisation sample ($M = 71$, $SD = 15.4$ – Abidin, 1995). Biological SDQ scores were in line with community samples, with 10% classed 'abnormal' (Goodman, 1997), whereas adoptive scores were akin to high-risk samples, with 49% classed 'abnormal' (Goodman and Scott, 1999).

Relations between adoption status and children's behaviour

The relation between adoption status, SDQ internalising/externalising and total EFR scores was investigated in a one-way ANCOVA, with adoption status (adoptive, biological) as the independent variable and the child/parent age controlled by entering these

Table 3. Estimated marginal means (EMM) of child behaviour difficulties by adoptive status.

Variable	Adoptive or biological child	EMM	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Internalising problems	Adoptive	8.74	0.55	7.66	9.83
	Biological	7.07	0.34	6.40	7.74
Externalising problems	Adoptive	11.37	0.60	10.19	12.56
	Biological	5.99	0.35	5.30	6.68
Attachment-related behaviour difficulties	Adoptive	28.31	1.22	25.90	30.72
	Biological	14.84	0.71	13.43	16.24

Note: Covariates in the model were evaluated at the following values: parent age (years) = 38.99, child age (years) = 6.27.

factors as covariates. Table 1 shows the mean SDQ internalising and externalising scores for both adoptive and biological groups. There was a main effect of adoption status for internalising behaviours ($F(1, 249) = 18.03, p = .000, \eta^2 = .062$) and externalising behaviours ($F(1, 249) = 66.15, p = .000, \eta^2 = .207$), with adoptive parents reporting more internalising and externalising behaviours from their children than their biological counterparts. Table 1 also shows EFR total scores for both groups. The relation between adoption status and EFR scores was investigated in a one-way ANCOVA, as above. There was a main effect of adoption status ($F(1, 249) = 111.76, p = .000, \eta^2 = .290$), with adoptive parents reporting more attachment-related behaviour difficulties towards them from their children compared with biological parents. Estimated marginal means (displayed in Table 3) confirmed that adoptive scores remained higher than biological scores when differences in child/parent age were accounted for on all child behaviour measures.

Relations between adoption status and parenting stress

The relation between adoption status and PSI-SF scores was investigated in a one-way ANCOVA with adoption status (adoptive, biological) as the independent variable and child/parent age as covariates. There was a main effect of adoption status ($F(1, 249) = 49.04, p = .000, \eta^2 = .157$), with adoptive parents reporting higher levels of parenting stress than biological ones. Given that the groups differed on all reported child behaviour measures, and the positive correlations between PSI-SF and child behaviour scores, the ANCOVA was re-run with SDQ and EFR scores included as additional covariates. Controlling for children's difficulties, there was no main effect of adoption status on PSI-SF scores ($F(1, 247) = 2.10, p = .148, \eta^2 = .003$).

Discussion

This was the first UK study to investigate parenting stress and to explore its associations with child internalising, externalising and attachment-related behaviour difficulties in a community sample of adoptive parents of later adopted children and to compare their situation with a community sample of biological parents.

Limitations

Before conclusions are made, several limitations of the methods used in the study should be highlighted. The cross-sectional nature of this study limits conclusions about causality. As a questionnaire-based survey, it is liable to common method variance and correlations between measures. While the EFR appears promising as a parent-report measure of attachment-related difficulties, it does not yet have the same weight of psychometric development behind it as the other measures used in this study. Indeed, the study does support the further development of the EFR as a tool for identifying needs in this population. The use of targeted advertising, a password-protected portal and clear inclusion/exclusion criteria were intended to reduce inappropriate participation from those not meeting the inclusion criteria. However, the potential for bias by using an online recruitment methodology would potentially limit the generalisability of these findings. We are also not able to report on completion time of each respondent and whether filling in the questionnaires occurred at one sitting or across a wider range of time that might alter their reporting.

Findings

We found that adoptive parents reported significantly higher parenting stress than biological parents, with 70% of the former reporting very high levels that would be of clinical concern. Statistical analyses showed that this difference in parenting stress levels was accounted for by adoptive children's greater internalising, externalising and attachment-related behaviour difficulties, which tended to be much lower in the biological children. In other words, parenting stress was associated with the difficulties of the child rather than whether the parent was an adoptive or biological parent. In short, given the greater difficulties adoptive parents face, their stress was likely to be much higher. These associations may assist a better understanding of what contributes to parenting stress for biological and adoptive parents but importantly, that adoptive parents are a particularly vulnerable group because of the greater challenges they encounter day to day in parenting children with emotional, behavioural and attachment related difficulties.

The high prevalence of parenting stress found in this sample of adoptive parents suggests that later adopted children and their adoptive parents may be a particularly vulnerable population. Using a standard measure of emotional and behavioural difficulties, nearly half of all the adopted children (49%) in this sample scored within the abnormal range akin to samples of children who are looked after (e.g. Ford, et al., 2007). Our ability to make comparisons with other studies is limited due to issues with sample representativeness (as discussed earlier), but the higher levels of parenting stress and child behaviour difficulties reported here for UK adoptive families correspond with previous studies of children who were adopted post-infancy with backgrounds of maltreatment (Palacios and Sánchez-Sandoval, 2005).

Targeting parental stress

The recent theoretical concept in the parenting literature of blocked care (Hughes and Baylin, 2012) suggests that parenting may be compromised by the experience of stress and hypothesises a deep neurobiological impact of stress on the interpersonal process of parenting. Taken together with the findings of the present study, this theory indicates that it may be helpful to screen adoptive parents for parenting stress directly when families present with

children who have internalising, externalising or attachment-related behaviour difficulties. The clinical presentation of ‘blocked care’, whereby parents may present as defensive and hostile, perhaps due to the difficulties they are experiencing, may mean that wider and more holistic assessments by services should screen for parenting stress in order to make sense of such presentations. In this way, the recognition of parenting stress may be a vital component in the development of more effective parenting interventions. The focus may be on helping the parents manage their stress in their own right before they are able to implement other changes effectively. This would have implications for those receiving parenting advice; for example, while it may be understood when stress is down in a clinic-based setting, being able to implement these strategies when stress is high is likely to be lessened and therefore less effective. The ability to manage stress may also apply to the assessment of prospective adopters who may need to demonstrate factors associated with resilient parenting and an openness to seeking help in the future (Golding and Gurney-Smith, 2015).

Furthermore, while psychoeducational groups may show good outcomes and improve some elements of parenting in terms of skills and understanding, they do not necessarily reduce parenting stress (e.g. Gurney-Smith, et al., 2010). The need for a ‘new wave’ of intervention in adoption support may therefore be required. For example, evidence-based stress reducing interventions for adults such as mindfulness-based cognitive therapy (e.g. Segal, Williams and Teasdale, 2002) may be helpful, particularly as recent research indicates that individuals’ use of mindfulness is of relevance to parenting stress in adoption (Glossop, 2013; Gurney-Smith, Glossop and Granger, submitted).

Evidence of greater child psychopathology in adoption

Although adoption as an intervention in itself reduces the risk of long-term psychopathology (van IJzendoorn and Juffer, 2006), the present study demonstrates the potential enduring negative impact of early adversity in later adopted children in Britain. Alongside higher rates of child internalising and externalising difficulties, we found that higher rates of attachment-related child behaviour difficulties were reported by adoptive parents compared to biological ones. The high levels of child difficulty reported by this community sample of UK adoptive parents suggest a significant need for targeted post-adoption intervention. This is at odds with a low rate (under a third) of involvement with mental health or psychology services. Given the range of adoption services – from preparation to post-placement intervention – across the UK, it is not possible to determine whether our sample is truly representative. However, the association between stress and the degree of difficulties is compelling. Considering the established negative impact of parenting stress on parents and children, the present findings should add to the ongoing debate regarding when adoptive children’s behaviour and ‘attachment-related difficulties’ (both of which are associated with stress) reach thresholds for clinical intervention in the absence of diagnosed child mental illness (Ratnayake, Bowlay-Williams and Vostanis, 2014). On the basis of this study, if services are not available, the thresholds for families in meeting child mental health service criteria may be better informed by recognition of the impact of the parenting task, with due consideration given to family variables such as parenting stress, which is relatively easy to measure. This is on top of later placed adopted children’s additional vulnerability to psychopathology and the need for interventions to support not just child well-being, but also parental well-being if improvements are to be seen in the parent–child relationship. This is especially the case where the risk of disruption is present and support and therapy are likely to be required

across a number of different areas of family functioning. Seeing these scenarios through an understanding of blocked care (and parenting stress) would bring about a fuller formulation and better care from health services, which may find themselves being asked to work with social care rather than focusing solely on whether or not the child has a mental disorder.

Conclusions

In this online survey sample, UK adoptive families with later placed children were found to be at higher risk of child and parent difficulties than biological families, yet many do not report accessing services. The study showed that across both biological and adoptive parents, higher levels of parenting stress are predicted by perceived child behaviour difficulties, including attachment-related behaviour problems. This cross-sectional study cannot establish causality, so further research is needed to understand the process of how parenting stress should develop if targeted and informed interventions are to be helpful. However, an emphasis on the presentation of parents under stress (alongside the child's levels of difficulties) may better inform services wherever they encounter these families. Further study of an adolescent population would give a fuller picture for all adoptive families, but would require measures validated to examine parenting stress in this group. This study offers some justification for the investigation of interventions that directly address parenting stress for adoptive parents if comprehensive adoption support services are to be developed that match the needs of both parents *and* their children.

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