The psychological wellbeing of parents and foster carers:
The role of self-efficacy and challenging behaviours

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Structured Abstract

Background

The past decade has shown a steady increase in the disparity between the number of children in foster care, which has increased significantly, and the number of foster carers providing care. Retention rates of foster carers are low, with most carers only fostering for between 6 months and 15 years. One of the key factors influencing retention rates is stress resulting from caring for children with challenging behaviours and emotional difficulties. It has been suggested that parenting self-efficacy improves emotional wellbeing and parenting practices in parents and also enhances developmental outcomes for children. While limited research has been conducted regarding self-efficacy in foster carers, recent research proposes a positive relationship between self-efficacy and foster carer psychological wellbeing. To date, no research has compared stress levels, psychological wellbeing or self-efficacy between foster carers and parents. Such a comparison would contribute to our understanding of the unique experience of foster carers and of how to best support them in this challenging role.

Objectives

The primary aim of this study was to compare levels of self-efficacy, parenting stress and psychological wellbeing in foster carers and regular parents. Additionally, this study explored the mediating role of self-efficacy in the relationship between psychological wellbeing and challenging behaviours in both foster carers and parents.

Methodology

All registered foster carers with one or more children currently in their care, and parents currently caring for a child under the age of 18, were eligible to participate. A total of 68 parents and 68 foster carers were recruited from local foster care agencies.
and foster care support groups in New South Wales and Victoria, in addition to parent support groups, social networking, community health centres and the University of Newcastle. Participants completed an online survey consisting of the Parenting Stress Index (PSI-4), the Parenting Sense of Competency scale (PSOC), the Depression, Anxiety and Stress Scale (DASS-21), a measure of challenging behaviour and demographic information. Statistical analyses included an Analysis of Variance (ANOVA) exploring between group differences and hierarchical multiple regressions investigating the influence of self-efficacy and challenging behaviours on the respondent’s psychological wellbeing. A mediation analysis was also completed exploring the mediating role of self-efficacy in the relationship between psychological wellbeing and challenging behaviours.

Results

Foster carers reported higher levels of mental health diagnoses in the children in their care, as compared to the parent group. No significant between-group differences were identified on the depression, anxiety, self-efficacy or parent distress scales, however foster carers did report significantly higher levels of challenging behaviours than those in the parent group. A lack of variance between the foster carer and parent groups resulted in the remaining analysis being conducted with the group as a whole. When examined as one group, hierarchical multiple regressions demonstrated that challenging behaviour accounted for 15.7% (parent distress), 6.1% (anxiety) and 8.4% (depression) of variance in each outcome variable. Each model improved significantly once self-efficacy was included, and explained an additional 5.2%, 2.4% and 6.8% of variance in parent distress, anxiety and depression respectively. The results of the
bootstrapping technique confirmed the partial mediating role of self-efficacy in the relationship between challenging behaviour and parental distress, and depression.

Conclusions

These results supported the initial hypothesis in that higher levels of challenging behaviour displayed by children were reported by foster carers. However no significant differences were observed between groups in levels of depression, anxiety, parent distress or self-efficacy. The results also support past research (Morgan & Baron, 2011) identifying self-efficacy as a partial mediator in the relationship between challenging behaviours and psychological wellbeing (specifically parental distress and depression).

Implications

This information contributes to current research about parenting self-efficacy in foster carers, and in the understanding of differing parenting experiences between foster carers and parents. Such information may assist in improving support and training for foster carers, and subsequently improve retention rates of foster carers.
Critical Literature Review

Foster Care in Australia

The Australian foster care system consists of a number of state-based systems which are responsible for child protection in each state and territory. It is important to note that there are a number of significant differences in the policies and procedures of each system, including risk of harm reporting procedures, care and protection orders, intervention services, and legislation (Australian Institute of Health and Welfare [AIHW], 2012). Across all states in Australia there are a number of ongoing problems including an increasing number of children in care, a decreasing number of families providing care, a high rate of placement breakdowns and difficulty sourcing suitable placements for children in the system (Delfabbro, Taplin, & Bentham, 2002). Between 2010 and 2011 the number of children residing in out-of-home care in Australia increased from 35,895 to 37,648. Of those children, 93% resided in home-based care, with 44.6% of those children living in a formal foster care arrangement. The remaining children were living in other kinds of home-based care such as kinship care. With fewer families providing foster care, the disparity between the number of children in care and the number of foster carers available to provide care has increased significantly in the last ten years in Australia (Delfabbro, King, & Barber, 2010). The financial burden of out-of-home care is also significant, with an estimated $2.8 billion spent on child protection and out-of-home care services between 2010 and 2011 (AIHW, 2012). Taken together, these factors highlight the importance of exploring not only the experience of foster carers in Australia, but also how to improve the recruitment and retention of skilled foster carers.
Children are placed in foster care if they have been subjected to physical, sexual or emotional abuse, neglect, domestic violence, or if their parents have been unable to provide them with an adequate level of care or protection due to a range of factors including medical or mental health problems (Delfabbro, et al., 2010). As a result of these early experiences children in care have disproportionately high levels challenging behaviours such as aggression, lying, and absconding (Farmer, Lipscombe, & Moyers, 2005), and psychiatric disorders (Mcmillen et al., 2005). The high demands associated with caring for a child with challenging behaviours or a psychiatric disorder often results in a placement breakdown, whereby the child will be removed from their current placement. Delfabbro, Barber and Cooper (2000) examined placement disruption and dislocation of children in care in South Australia, reporting that at least 23 per cent of children surveyed had been placed a minimum of ten times prior to the study. Disruptions to placements and frequent changes of carers can undermine a child’s capacity for developing meaningful attachments, disrupt friendships, and contribute to discontinuities in education and health. Hence, children often develop further challenging behaviours in order to cope with rejection and the unpredictable nature of their environment (Macdonald & Turner, 2005). Placement breakdowns also tend to involve significant geographical moves which may disrupt or reduce contact with the child’s birth family.

Foster carers are faced with the daunting task of managing significant challenging behaviours and advocating for the young person’s mental health care, often without the appropriate experience and knowledge. Due to limitations in education or training foster carers often feel unprepared or struggle to understand the specific needs of the young person in their care (Kerker & Dore, 2006). Furthermore, foster carers tend
to be faced with a range of stressors in addition to regular parenting stress such as complaints or allegations of misconduct, contact with birth family, disagreements with foster care agencies, tension within the foster family and placement breakdowns or disruptions (Wilson, Sinclair, & Gibbs, 2000). Placement breakdowns not only have a significant impact on children in care, but can also result in high levels of stress and feelings of failure for the foster carer (Wilson, et al., 2000).

A qualitative study conducted in the United Kingdom examined the experience of foster carers over a 6 year period (Sinclair, Gibbs, & Wilson, 2004). Of those who participated, only 14 per cent of carers were not living with another adult or children of their own. The study identified both positive and negative effects on the foster carers and their families. A portion of carers reported that by being part of the fostering process their biological children enjoyed supporting the fostered child, learnt about others’ misfortunes and became more caring and understanding. Others reported that their biological children found it difficult to cope with sharing property, the foster child’s behaviour, damage to property, their parents’ stress, and were distressed when a fostered child they were close to was moved on to another care placement. However it is important to note that only 3 per cent reported that they had not gained a sense of satisfaction from fostering (Sinclair, et al., 2004).

Aggressive behaviour, absconding and lying have been identified as the main behaviours affecting the psychological wellbeing of foster carers (Farmer, et al., 2005), resulting in high levels of stress, anxiety and depression (Cole & Eamon, 2007). The strain experienced by foster carers can result in lower levels of sensitive parenting, a reduced ability to respond to the child’s emotional age rather than chronological age, and a dislike of the child they care for (Farmer, et al., 2005). Stress for foster carers also
arises from uncertainty about how to support foster children who have been sexually abused in the past, and how to protect themselves from possible allegations (Sinclair, et al., 2004). Additionally, sexualised behaviours displayed by the foster child also tends to raise concern about the potential risk to the safety of the foster carer’s own children (J. D. Brown & Bednar, 2006). Hence, it is important to ensure that foster carers are provided with adequate support, education and training in order to provide them with confidence and knowledge to manage challenging behaviours and emotional difficulties.

Providing carers with sufficient support, education and training can also positively impact on the recruitment and retention of carers. Whilst placement breakdowns are often attributed to challenging behaviours displayed by the child in care (Chamberlain et al., 2006), foster carer fatigue, burnout, feeling undervalued and a lack of support also can result in the termination of a foster care placement (Heller, Smyke, & Boris, 2002). Indeed, the primary reasons foster carers report for quitting or intending to quit providing care include a lack of agency support, poor communication with agency workers, and the child’s behaviour (Butcher, 2005; Rhodes, Orme, & Buehler, 2001). Thus it is important to identify how to best support foster carers and assist them in reducing the stress experienced in this role, in order to reduce the occurrence of placement breakdowns and to achieve the best possible outcomes for children in care.

Self-Efficacy

Perceived self-efficacy refers to an individual’s belief that they are able to manage difficult or novel tasks and demanding situations. Bandura’s theory of self-efficacy (Bandura, 1977, 1989) proposed that the strength of an individual’s belief about their own effectiveness will influence whether they will exert effort in performing a specific task, decrease their efforts, or give up. He also stated that an individual’s
perception of their capabilities will affect the level of stress and depression experienced in a difficult situation.

In explaining the role of self-efficacy, Bandura suggested that those who believe they are able to cope in a particular stressful situation are not as disturbed by unhelpful apprehensive cognitions or autonomic arousal, as those with low perceived self-efficacy (Bandura, 1977, 1989). Furthermore general self-efficacy has been found to be negatively related to levels of anxiety, depression, anger and negative affect, and positively related to feelings of optimism, the ability to regulate emotions, higher self-esteem, levels of life satisfaction and an orientation towards the future (Bandura, 1982; Luszczynska, Gutierrez-Dona, & Schwarzer, 2005).

Within Bandura’s framework, self-efficacy is viewed not as a fixed trait, but as a dynamic system that changes in response to the fluctuating demands of the task, individual development and situational factors (Bandura, 1989). However other researchers have explored the broader concept of domain self-efficacy rather than task-specific self-efficacy, which views self-efficacy as being a sense of efficacy across a range of areas of functioning, based on a range of life experiences (Coleman & Karraker, 1997; Woodruff & Cashman, 1993). Bandura appears to be accepting of the possibility that self-efficacy may have a degree of generality in that many activities will inevitably require similar skills and functions (Bandura, 1989). This current study remains true to Bandura’s framework, assuming that self-efficacy is a dynamic system.

The theory of self-efficacy has been applied to specific tasks such as parenting. Parenting self-efficacy refers to the belief in one’s competence and effectiveness in managing a range of tasks and situations relating to parenting. Parenting self-efficacy includes a parent’s belief that they are able to positively affect their child’s behaviour
and development (Coleman & Karraker, 2003). Parenting literature has long identified self-efficacy as an important variable influencing parent outcomes, with high parenting self-efficacy strongly associated with positive parenting practices and behaviours (Coleman & Karraker, 1997), and positive developmental outcomes for children (Gilmore & Cuskelly, 2008). Parents with high levels of self-efficacy also appear to demonstrate more positive expectations regarding the possibility of change (Sanders, 1999). On the other hand, parents with low parenting self-efficacy tend to struggle in utilizing effective parenting skills when faced with difficult situations relating to their child’s behaviour or wellbeing (Jones & Prinz, 2005). Coleman and Karraker (2003) explored the role of maternal self-efficacy beliefs in influencing maternal competence with toddlers, the behaviours of the toddler, and the mother-child interaction. A significant relationship was identified between domain-specific parenting self-efficacy beliefs and child behaviours such as affection towards mother, negativity, enthusiasm, compliance and avoidance of mother, however no relationship was identified between parenting self-efficacy beliefs and parental competence. It is likely that these results were influenced by the short period of observation, and the generally low level of oppositional behaviour displayed by the children. The relationship between self-efficacy beliefs and toddler behaviour may have been more pronounced had the mothers in this study experienced a greater challenge in keeping their child on task (Coleman & Karraker, 2003).

The role of perceived self-efficacy has also been explored in relation to children with more challenging behaviours, such as those with autism. Kuhn and Carter (2006) examined maternal self-efficacy and parenting cognitions including guilt, agency and knowledge of the disorder in mothers of children with autism. Mothers who actively
encouraged their child’s development experienced higher maternal self-efficacy, while those who reported regular feelings of guilt experienced lower maternal self-efficacy. No relationship between autism knowledge and maternal self-efficacy was found, possibly due to the ceiling effect observed for the autism knowledge measure. Those who reported higher levels of maternal depression and stress also experienced lower maternal self-efficacy (Kuhn & Carter, 2006).

Mixed results regarding the impact of parenting self-efficacy were reported by Hess, Teti and Hussey-Gardner (2004) who explored the relationship between parental self-efficacy and knowledge of child development to maternal behavioural competence. The children of all participants had been born prematurely, were aged 7 months or younger, and were being monitored by a high risk clinic. Mothers were observed in a free-play session with their child and then completed a number of questionnaires. Maternal behavioural competence was based on a number of factors including physical contact, the parent’s ability to respond sensitively to their child’s cues, verbalisations, visual contact, and the parent’s response to their child’s positive and negative behaviour. It was reported that mothers with high parental self-efficacy and a high level of knowledge of child development demonstrated improved play interactions with their child as compared to those with lower parental self-efficacy. Those with high self-efficacy and low knowledge were less competent in interacting with their child, suggesting that parent knowledge has a moderating effect on the relationship between these variables. The authors identified this group as naively confident mothers. These findings partially support Bandura’s premise that the relationship between self-efficacy and behaviour is affected by the level of task knowledge (Bandura, 1989).
However, as this study was not longitudinal, it is difficult to determine whether parental self-efficacy was influencing maternal behaviours, or whether the opposite was occurring (Hess, et al., 2004). Despite this limitation the study provides an interesting observation regarding the role of knowledge in the relationship between parental self-efficacy and parenting behaviours.

In addition to the effect parenting self-efficacy has on parent psychological wellbeing and parenting behaviours, it has been shown that self-efficacy can act as a mediating variable in the relationship between parenting stress and the mental health of parents in a range of settings. For instance, Teti and Gelfand (1991) investigated the mediating role of maternal self-efficacy in the relationship between maternal parenting behaviour and the mother’s social support, mental health wellbeing and perceptions of their child’s temperament. Eighty-six mothers of children aged 3 to 13 months took part, with 48 of these mothers undergoing treatment for depression. A significant negative relationship was observed between maternal self-efficacy and perception of infant difficulty, and between maternal self-efficacy and depression. The results indicated that maternal self-efficacy acts as a mediating factor in the relationship between maternal competence and perceptions of their child’s difficult behaviour, depression and social supports. These results support more recent research regarding the effect of parenting self-efficacy on psychological wellbeing and on a parent’s perception of their child’s behaviour, as will be discussed below.

Despite the significance of the results of Teti and Gelfand (1991), it is important to remember that this study was only focusing on parents of very young children, thus limiting the generalizability of these results to parents of older children. A number of studies have elected to examine self-efficacy in families with younger children, some
because of the dramatic changes that occur in the first 2 to 3 years in a child’s life, and the associated challenges parents face during this time. According to the theory of self-efficacy, how individuals are able to develop new skills and adapt during a challenging time is facilitated by their perceived self-efficacy (Bandura, 1982; Coleman & Karraker, 2003). This study also measured maternal perceptions of their child’s temperament, as opposed to an objective measure of the child’s temperament. While there are arguments for and against the use of such measures (Teti & Gelfand, 1991), an additional objective measure of infant behaviour or temperament would have provided further information about the relationship between self-efficacy and maternal behaviour.

Kwok and Wong (2000) examined the mental health of parents with children aged 2 to 12 years, in addition to sources of parenting related stress. It was reported that participants’ perceived parenting self-efficacy acted as a mediator in the relationship between the individual’s perceived level of stress and the quality of their mental health. Those with lower perceived parenting self-efficacy also reported poorer mental health, supporting Bandura’s (1977) hypothesis that those with low self-efficacy experience high levels stress, depression and anxiety. However a significant limitation of this study is the fact that the study took place in Hong Kong, and subsequently the results may not be able to be generalized to western cultures due to the influence of cultural and social factors. According to Kwok and Wong (2000), Chinese parents tend to interpret assertive and independent behaviour in children as a sign of disrespect or difficult behaviour. It is possible that cultural values, practices and demands specific to Chinese culture, in addition to restrictive and authoritarian parenting styles may result in a different experience as compared to parents in western society.
Self-efficacy has also been identified as a mediator between problem behaviours in children with autism, and levels of parental anxiety and depression. Hastings and Brown (2002) explored parenting self-efficacy and psychological wellbeing in parents of children with autism. Interestingly, this research suggested that the child’s challenging behaviour affected mothers and fathers differently. An inverse relationship between self-efficacy and anxiety was observed in fathers, but only when the child demonstrated high levels of challenging behaviours. However self-efficacy failed to have an effect on the fathers’ anxiety when children demonstrated lower levels of challenging behaviours. This suggests a moderating role of self-efficacy, as this relationship did not exist when children showed low levels of challenging behaviour. On the other hand, a mediating role of self-efficacy was observed in the relationship between challenging behaviours and anxiety and depression in mothers (Hastings & Brown, 2002). This study also took a slightly different approach in that it obtained an independent measure of child behaviour from the child’s school teacher, in addition to parent reports of their own psychological distress.

In considering these results, a number of limitations must be noted including the small sample size used in this study, the highly educated nature of the families who took part, and the fact that many children resided at the school as boarders during the school week. These results are also specific to parents of children with autism (Hastings & Brown, 2002). Despite some limitations regarding the generalizability of these results, they highlight the importance of considering the different effect self-efficacy has on the psychological wellbeing of mothers and fathers, in addition to the role of self-efficacy in the relationship between challenging behaviour in children and parent distress, anxiety and depression.
Recent research regarding self-efficacy provides considerable evidence suggesting that parenting self-efficacy influences both child factors such as development and behaviour (Gilmore & Cuskelly, 2008), and parent factors including parenting practices, psychological wellbeing and expectations of change (Coleman & Karraker, 1997; Sanders, 1999). Parenting self-efficacy has also been identified as acting as a mediating factor in the relationship between child related stress and the psychological wellbeing of parents (Hastings & Brown, 2002; Kwok & Wong, 2000; Teti & Gelfand, 1991). Thus it is important to understand how best to improve perceived self-efficacy in those caring for children with challenging behaviours.

**Parenting Self Efficacy as Addressed by Parent Training Programs**

As the critical influence of parenting practices on the growth and development of children has been confirmed, parenting programs often focus on improving parenting self-efficacy in order to encourage the use of positive parenting practices. An example of this is a behavioural parent training intervention designed by Webster-Stratton (1981) which aims to improve maternal knowledge regarding behavioural difficulties and parenting practices, reduce stress, and improve mother-toddler interactions. When implemented with mothers of 2-year-old children (Tucker, Gross, Fogg, Delaney, & Lapporte, 1998) significant improvements in self-efficacy were observed and were maintained for one year post intervention. Similarly the Triple P Positive Parenting Program framework identifies the importance of strengthening perceived parenting self-efficacy by improving parent knowledge, skills and confidence in managing behavioural and emotional difficulties in preadolescent children (Sanders, 1999).

An understanding of the role of parenting self-efficacy is required to appropriately guide services in the types of support and training provided to foster
parents with the aim of achieving the best possible outcomes for children residing in foster care. Despite widespread use of the Triple P program with regular parents, at this time there is currently no published evidence of this program being used specifically with foster carers. Herbert & Wookey (2007) investigated the efficacy of the Child Wise Program which was designed to assist foster carers in understanding behavioural principles and cognitive-behavioural techniques, improve skills in reducing problem behaviours, develop carers’ confidence in their ability to respond to difficult behaviour, and reduce the incidence of placement breakdown. This investigation revealed that the majority of participants experienced increased confidence in managing difficult situations however no comparison group was available. It is important to note that this study referred only to confidence in utilising behaviour management strategies, rather than self-efficacy which implies that the individual believes in their ability to implement change and achieve the desired outcome (Bandura, 1977).

The importance of focusing on foster carer self-efficacy was highlighted by Macdonald and Turner (2005) who developed a program designed to assist foster carers in managing difficult behaviours utilising cognitive-behavioural methods. They hypothesized that individuals tend to not respond appropriately in highly stressful situations because they do not believe in their own ability to bring about change, rather than lacking the skills or insight about how to respond. Their program was designed to promote carers’ confidence by applying cognitive and behavioural principles to their own responses, thus reinforcing the foster carers’ behaviour. At the conclusion of the program foster carers in the treatment group demonstrated an improvement in their knowledge regarding challenging behaviour and reported feeling more confident in managing difficult situations. However, while participants were able to successfully
analyse their child’s behaviour, they were not able to implement positive behaviour management strategies. It was suggested by the authors that participants did not develop a sufficient understanding of the interventions and techniques explained, and instead focused on identifying the function of their child’s behaviour (Macdonald & Turner, 2005). Alternatively, including an active learning component to the program may have resulted in participants implementing such strategies after the training was complete.

Another well established program focusing on behaviour management in foster care is Multidimensional Treatment Foster Care. This program is designed for children and young people with significant behavioural problems. The program only utilises foster carers who have been trained to form part of the treatment program, which is designed to reduce difficult behaviours and enhance social skills. This is a highly structured program, involving a large treatment team, with much of the work occurring in the foster home. This program differs to others mentioned in that the goal is to return the young person to their original family (Westermark, Hansson, & Vinnerljung, 2007).

The KEEP program (Keeping Foster Parents Trained and Supported), is based on the Multidimensional Treatment Foster Care program, however is less intense. It is designed to support and improve foster parent skills through the implementation of positive behaviour management techniques. The focus of this program was to increase carers’ use of positive reinforcement strategies as compared to the level of discipline they used. In the United States this program has been found to increase parent effectiveness in behaviour management skills, which resulted in fewer child behaviour problems (Chamberlain et al., 2008).

In examining the use of such parent training programs with regular parents and foster carers, it is important to remember that foster carer responses to challenging
behaviours are affected by limitations placed on them in the form of departmental
guidelines or organisational procedures. Some of the more common discipline methods
that regular parents use, such as withholding a child’s pocket money or withdrawing
specific privileges, may be prohibited by foster care agencies (Macdonald & Turner,
2005). Such restrictions may impact a foster carer’s sense of control and confidence in
responding to their child’s behaviour. As these guidelines and restrictions vary from one
organisation to another, difficulty lies in developing training that will be relevant for a
range of foster carers. Thus a program focusing on improving a foster carer’s sense of
self-efficacy may be more beneficial than one focusing solely on education regarding
behaviour management strategies.

While a large body of research has been dedicated to developing education and
training programs to assist parents in managing their child’s challenging behaviours,
programs designed to support and educate foster carers are not as common. Such
programs are important in supporting foster carers who are often faced with managing
particularly challenging behaviours. Due to the role of self-efficacy in helping parents
implement appropriate parenting practices, and the clear differences between regular
parenting and foster caring, it is important that self-efficacy as reported by foster carers
is examined further.

Foster Carer Self-Efficacy

Currently there are few research studies examining the role of parenting self-
efficacy and challenging behaviours in the psychological wellbeing of those providing
foster care. Whenan, Oxlad and Lushington (2009) investigated the relationship
between child emotional and behavioural difficulties, the child-carer relationship and
foster carer parenting self-efficacy, and the foster carer’s wellbeing, fostering
satisfaction, and intention to continue caring. The results suggested that difficulties forming a positive relationship with the child results in poorer psychological wellbeing and reduced satisfaction for foster carers. A significant relationship was also observed between foster carers’ self-efficacy relating to challenging behaviours and their psychological wellbeing, fostering satisfaction and intention to continue caring. Those carers with higher parenting self-efficacy also perceived fewer behavioural problems. However based on this study it is unknown whether this higher parenting self-efficacy was due to the carer reducing the frequency of challenging behaviours through their use of skilled parenting practices, whether they had a higher threshold for difficult behaviours, or whether the children showed fewer or no behavioural difficulties in general. It is important to note that this study did not show a significant relationship between challenging behaviour and foster carer psychological wellbeing, fostering satisfaction or intention to continue providing care (Whenan, et al., 2009). There are a number of possible explanations for this result. Foster carers may be sufficiently screened prior to commencing care-giving to ensure those providing care are less vulnerable to depression, anxiety and stress symptoms, that they view the situation as temporary, or they are mentally prepared for children to show more challenging behaviours than usual (Whenan, et al., 2009). However further research is required to clarify the reason for this unexpected result.

The research presented by Whenan, Oxlad and Lushington (2009) was limited by a small sample size of 58 participants and by the fact that participants volunteered to participate. Furthermore, it could be argued that those who volunteered did so because they were experiencing better wellbeing at the time of the study and were satisfied with their role as a foster carer, whereas those who were experiencing significant stress may
have been less likely to take the time to participate. Furthermore the cross-sectional
design of the study does not allow for the likelihood that child behaviour and emotional
wellbeing, parent self-efficacy, and the child-carer relationship all change over time.
Despite these limitations, this research has highlighted the importance of parenting self-
efficacy in managing challenging behaviours, thus protecting foster carer wellbeing and
their motivation to continue providing care. This represents a significant contribution to
a relatively new area of research.

Morgan and Baron (2011) also explored the role of behavioural difficulties in
children, parenting self-efficacy, and the impact of these factors on foster carer
psychological wellbeing. This study utilised a similar sample size to Whenan and
colleagues (2009), in which 58 foster carers completed a series of self-report measures.
The results showed that higher levels of challenging behaviours were associated with
increased parental stress, anxiety and depression. Furthermore, higher levels of
parenting self-efficacy were related to lower parenting stress, anxiety and depression
levels. Additionally, the results demonstrated a high level of both challenging
behaviours and foster carer stress, supporting the suggestion that foster carers require
higher levels of support in caring for children in foster care. However relatively low
levels of anxiety and depression were observed which suggests that screening and
training processes are limiting the number of individuals with poor psychological
wellbeing providing foster care. This result was in line with the results presented by
Whenan and colleagues (2009). Another suggestion made by the authors is that the
instrument used in this study to measure parenting stress, the Hospital Anxiety and
Depression Scale (HADS), was not sensitive enough to measure stress in carers which
may warrant further investigation.
Morgan and Baron (2011) also explored the mediating role of parenting self-efficacy in the relationship between challenging behaviours and psychological wellbeing, and found that self-efficacy did partially mediate this relationship. This suggests that foster carers with high parenting self-efficacy are somewhat protected from stress, anxiety and depression related to their child’s challenging behaviour. This study was the first to explore this relationship in a sample of foster carers, and has important clinical implications for supporting foster carers and out of home care placements.

A number of limitations for this study should be noted. This research was conducted with a group of foster carers from a single agency, and with a relatively small sample size of 58 participants. Furthermore this research did not take into account a number of factors that may have accounted for variance in foster carer wellbeing, such as training received previously, whether the participant is the primary or secondary carer, and differing coping styles. Finally this study, much like that of Whenan and colleagues (2009), took a cross-sectional approach, thus being unable to take into account the unstable nature of many factors over time such as stress, challenging behaviours and perceived self-efficacy (Morgan & Baron, 2011).

**Current Study**

Past research has demonstrated the effect self-efficacy has on parental psychological wellbeing and parenting behaviours, in addition to the role of self-efficacy as a protective factor in managing challenging situations and high levels of stress in a range of parenting situations. Foster parenting and biological parenting are significantly different tasks with foster carers experiencing a range of stressors regular parents are not typically exposed to (Wilson, et al., 2000). In supporting foster carers in
what is often a very difficult role, it is important to determine whether existing literature regarding parenting stress, challenging behaviours and self-efficacy are relevant to this population. While Morgan and Baron (2011) and Whenan and colleagues (2009) have explored these factors in a foster carer sample, it is important to extend this research and compare the two groups utilising the same measures and variables.

It has been acknowledged that these two types of parenting are significantly different, particularly as foster carers are not the legal guardian of the child in their care and as such must consult with foster care agencies about discipline and other matters. Foster carers are also faced with challenges relating to their involvement with foster care agencies, birth families, placement disruptions and disruptive behaviours resulting from a child’s history of abuse or neglect (Farmer, et al., 2005; Wilson, et al., 2000). At this time no research has compared the two groups directly with regard to self-efficacy, stress or psychological wellbeing. This information may assist in designing training and support programs specifically for foster carers to improve foster carer wellbeing, carer retention rates and long term outcomes for children in care. Not only is it important to understand the role self-efficacy plays in such training and subsequently the foster carers’ psychological wellbeing, but it is also important to understand how self-efficacy is improved whether this is through improving carers’ knowledge of behaviour management strategies, improving their confidence in their own ability or developing a sense of mastery (Morgan & Baron, 2011).

The current research is designed to further existing knowledge relating to perceived self-efficacy as reported by foster carers in Australia, and to compare their levels of self-efficacy, parenting stress (specifically challenging behaviour), and psychological wellbeing to regular parents. This information is expected to contribute to
current knowledge about the role of self-efficacy in the psychological wellbeing of foster carers, and subsequently how to best support them in caring for children in foster care. It is anticipated that knowledge about perceived self-efficacy, how to improve self-efficacy and psychological wellbeing in foster carers will assist in improving retention rates and long term outcomes for fostered children.
Abstract

Parenting self-efficacy has been found to play an important role in the use of positive parenting practices, parent and foster carer psychological wellbeing, and positive outcomes for children in foster care and in the care of their parents. The current study examines perceived parenting self-efficacy, psychological wellbeing and levels of challenging child behaviours in foster carers and parents. Sixty-eight foster carers and sixty-eight parents completed an online survey exploring each of these variables. Results demonstrated no significant between-group differences on depression, anxiety, self-efficacy or parent distress measures. However foster carers reported significantly higher levels of child challenging behaviours as compared to parents. Across all participants, self-efficacy was identified as a mediating factor in the relationship between challenging behaviours and psychological wellbeing (specifically parent distress and depression). These results support past research which has identified this relationship with foster carers and parents as separate groups.
The Psychological Wellbeing of Parents and Foster Carers: The Role of Self-Efficacy and Challenging Behaviours

1. Introduction

Over the last decade the number of children in out-of-home care in Australia has increased substantially, however at the same time the number of foster carers dropped dramatically by 23 per cent (Australian Institute of Health and Welfare [AIHW], 2012), resulting in a significant shortage of skilled foster carers. Current data indicates that the length of time foster carers provide care ranges from 6 months to 15 years, with an average of approximately 5.3 years (Centre for Excellence in Child and Family Welfare [CFECFW], 2012). As the number of children in foster care is increasing, the need to ensure the retention of skilled foster carers across Australia is a high priority (Delfabbro, et al., 2010). It is important to note that the foster care system in each Australian state and territory differs in their policies and procedures, risk of harm reporting procedures, care and protection orders, intervention services and legislation (AIHW, 2012).

The retention of foster carers is closely linked to challenges involved in looking after children, who often present with complex behavioural and emotional problems (Newton, Litrownik, & Landsverk, 2000). All children placed in foster care have been at risk of, or subjected to, varying levels and types of abuse and neglect prior to entering formal care arrangements including physical, emotional and sexual abuse. Additionally, children may have also been exposed to domestic violence and parental mental health problems (Delfabbro, et al., 2010). As a result, the children placed in care often engage in a range of problematic behaviours such as verbal and physical aggression, absconding, lying, difficulty regulating their emotions, and eating problems (Farmer, et
al., 2005; Macdonald & Turner, 2005). In addition, a disproportionately high level of psychiatric disorders, such as major depression, Post Traumatic Stress Disorder (PTSD) and high rates of suicide attempts, has been observed in older youths (who had been in foster care for an average of 4.5 years) (Mcmillen, et al., 2005; Sawyer, Carbone, Searle, & Robinson, 2007).

It has been demonstrated that foster carer wellbeing and positive parenting practices increase the likelihood of positive child outcomes, by promoting for example better quality child-carer relationships (Marcus, 1991) and placement stability (Wilson, 2006). Maintaining a long-term, stable placement has been shown to result in steady improvement in the child’s psychological wellbeing, while those in unstable placements have been observed to decline in their social adjustment over a two year period (Delfabbro, et al., 2010). Placement breakdowns have been attributed to both child related factors, such as challenging behaviours (Chamberlain, et al., 2006), and foster carer related factors such as fatigue, burnout, feeling undervalued and not being given adequate support (Heller, et al., 2002). Due to the significant impact of placement breakdowns on children in care and the potential for placement breakdowns to dissuade foster carers from continuing to foster in the future, there is a need for identifying factors that may improve foster carer wellbeing by reducing stress.

Whilst providing care to children in out-of-home care can be rewarding, compared to regular parenting there are many additional stressors that the foster carer needs to manage. Situations experienced by foster carers not typically experienced by regular parents include placement breakdowns and disruptions of care but also instances such as complaints or allegations, contact with birth family, family tensions within the foster carer’s family and disagreements with foster care agencies (Wilson, et al., 2000).
Research has reported that specific child behaviours such as aggression, absconding and lying also impact foster carer psychological wellbeing, particularly when there is a cumulative number of such behaviours (Farmer, et al., 2005).

Evidence suggests that stress significantly impacts upon parenting practices in foster carers and can result in lower levels of sensitive parenting, a reduced ability to respond to the foster child’s emotional needs, and a dislike of the young person. Furthermore, few foster carers who report being under significant strain identify as being highly committed to the child or as being highly engaged with the child (Farmer, et al., 2005). Thus, effective stress management skills may be key in improving parenting practices and long-term outcomes for children in care.

In exploring stress and the psychological wellbeing of parents and foster carers, it is important to examine individual factors that may assist in the management of stress and psychological wellbeing. One such factor is perceived self-efficacy which refers to an individual’s opinion of their skills. Bandura (1977) explored the concept of self-efficacy, explaining that an individual will avoid situations they perceive as exceeding their coping skills, while participating in activities they believe they are capable of managing. Self-efficacy can be generalised or can refer to a specific task, such as parenting. Parents with high parenting self-efficacy typically demonstrate confidence in utilising positive parenting skills, while those with low parenting self-efficacy are less confident using effective parenting practices in response to challenging behaviours displayed by their child (Jones & Prinz, 2005). More specifically, mothers with high perceived self-efficacy have been shown to display higher levels of positive parenting behaviours such as responsiveness, providing their child with a stimulating environment, and non-punishing practices (Coleman & Karraker, 1997; Sanders &
Similarly, parents with lower perceived parenting self-efficacy are more likely to give up and make internal attributions for failure, resulting in high levels of frustration, stress, depression and anxiety (Kwok & Wong, 2000). The concept of self-efficacy has also been explored among families caring for children with disabilities. For example among biological parents of children with autism, self-efficacy has been identified to have a mediating role between challenging behaviours and parent psychological wellbeing (Hastings & Brown, 2002). Thus, parenting self-efficacy does not only result in better developmental outcomes for their child (Gilmore & Cuskelly, 2008), it also affects the parents’ emotional, motivational, cognitive and behavioural responses.

Despite the important role of self-efficacy in relation to parenting practices, the research regarding self-efficacy in relation to foster caring is somewhat limited. Whenan, Oxlad and Lushington (2009) suggested that high levels of parenting self-efficacy were associated with better psychological well-being, and that lower self-efficacy was related to poorer carer well-being, although these relationships were found not to be statistically significant. Morgan and Baron (2011) explored how the relationship between challenging behaviours and foster carer psychological wellbeing was affected by levels of self-efficacy. The results of this study showed that increased levels of challenging behaviours were associated with higher levels of foster carer stress and symptoms of anxiety and depression with self-efficacy observed to act as a partial mediator in this relationship (Morgan & Baron, 2011).

To date, there has been no research comparing levels of self-efficacy and psychological wellbeing in parents and foster carers. This type of comparison is important in broadening our understanding of the unique experiences of foster carers as
compared to regular parents and the impact challenging behaviour has on parenting self-efficacy and psychological well-being in both groups. It is also important to understand the types of factors that may account for variability in foster carer wellbeing. This knowledge may assist in promoting improved psychological wellbeing and retention rates in foster carers, and consequently better outcomes for children in foster care. Thus the current study aimed to examine self-efficacy, psychological wellbeing and challenging behaviours in a cross-sectional survey-based study of foster carers and regular parents.

In the current study the following research questions were asked; 1) Do regular parents and foster carers differ with regards to self-efficacy as measured by The Parenting Sense of Competency Scale (PSOC); psychological wellbeing, as measured by the Depression, Anxiety and Stress Scale (DASS-21) and the Parenting Stress Index (PSI-SF-4), and their experiences of child challenging behaviours; 2) Are there correlations between self-efficacy, psychological well-being and challenging behaviours; 3) Does self-efficacy mediate the relationship between psychological well-being, and challenging behaviours, for foster carers and regular parents.

Due to the higher number of stressors that can be potentially encountered by foster carers, it was hypothesised that foster carers would report a higher level of challenging behaviours as compared to regular parents. It was also hypothesised that because of these additional stressors, foster carers would report higher levels of anxiety, depression and parent distress as measured by higher scores on The DASS-21 and PSI-SF-4.

Due to the demonstrated positive effects of self-efficacy on parenting practices, it was hypothesised that higher levels of parental self-efficacy, as measured by higher
scores on the PSOC would be associated with better psychological wellbeing as measured by lower scores on the DASS-21 and PSI-SF-4. Furthermore, it was expected that foster carers would demonstrate a lower level of parental self-efficacy than regular parents due to the range of challenging behaviours and emotional problems displayed by children in foster care. Finally, it was hypothesised that for both foster carers and parents, higher levels of challenging behaviours would be associated with poorer psychological wellbeing, however psychological wellbeing would improve with higher levels of self-efficacy.

2. Methods

2.1 Participants

All registered foster carers currently caring for children in out of home care under the age of 18, and parents currently caring for their own children under the age of 18 years, were eligible to participate in the study. Participants were recruited from across Australia, primarily New South Wales and Victoria. Participants were excluded if they provided kinship or respite-only care arrangements. Based on a power analysis conducted prior to commencing data collection, it was estimated that a minimum of 128 participants (64 foster carers and 64 parents) were required to provide 80 per cent power, using an alpha level of 0.05, to find effect sizes of at least 0.5.

2.2 Procedure

A cross-sectional sample of regular parents and foster carers participants were recruited between August and December 2012. Foster carers were recruited with the assistance of local foster care agencies (Life Without Barriers, Allambi Youth Services, Catholic Care and Lifestyle Solutions), and foster care support groups (Connecting Carers NSW, the NSW Foster Care Association and the Foster Care Association of
These organisations were provided with information about the study and how to access the survey online. Once organisational consent to participate was obtained, this information was distributed by the agency to foster carers by email, post, newsletters and website links. The researcher also met with both foster carer support workers and carers at foster carer support groups from Life Without Barriers and Catholic Care to provide further information and answer questions about the study.

Regular parents were recruited through advertising at community health centres, the University of Newcastle, parent support groups, through the researchers’ social networks by email and on social networking websites.

Due to the typically low response rate to posted surveys (Whenan, et al., 2009), it was decided that participants would be given the option of completing an online or paper version of the survey. No participants took the option of completing a paper survey. The survey was hosted by the Zoomerang online survey website (www.zoomerang.com). Consent to participate in the study was implied by participants’ submission of the completed online survey. Please see appendices 2 and 3 for details of the surveys.

2.3 Materials

2.3.1. Foster Carer and Parent Demographics

Background variables collected included foster carer and parent age, gender, education, marital status, whether parenting responsibilities were shared and how, employment status, annual income, number of children in care, years of parenting/caring experience, and their top three sources of support.

2.3.2. Child Demographics
Child factors collected included age, length of time in current placement (foster carers only), formal diagnoses, and whether the child or children required a high level of behavioural or medical care. Participants were also asked to indicate which challenging behaviours their child or children demonstrate, and how frequently, using a 5-point Likert scale. These behaviours included absconding, verbal and physical aggression, stealing and lying, in addition to behavioural and emotional problems including poor concentration, withdrawn affect, nightmares and sleep disturbance.

2.3.3. Parenting Sense of Competency Scale (PSOC)

The PSOC (Johnston & Mash, 1989) is a 17-item questionnaire designed to assess parents’ levels of satisfaction and perceived efficacy within their role as a parent. Questions are answered using a 6-point Likert scale. The satisfaction scale relates to parenting frustration, anxiety and motivation, while the efficacy scale relates to capability, problem solving ability, and competence. The final data analysis utilised the efficacy scale score only. Strong levels of internal consistency have been reported, ranging from .75 to .88 (Gilmore & Cuskelley, 2008; Rogers & Matthews, 2004). Evidence of concurrent validity relating to the Satisfaction factor has been reported however there is little support for the concurrent validity of Efficacy and Interest factors (Rogers & Matthews, 2004).

2.3.4. Parenting Stress Inventory – Short Form 4th Edition (PSI-SF-4)

The PSI-SF (Abidin, 1995) is a 36-item questionnaire measuring the level of stress experienced within the role of parenting. Questions are answered using a 5-point Likert scale to indicate the extent to which participants agree with specific statements. The total stress score consists of three scales including parental distress, parent-child
dysfunctional interaction and child difficulty. As challenging behaviours were measured by other means, the parental distress score was the focus of the final data analysis.

This measure was selected as it has been utilised with both foster and biological families (Morgan & Baron, 2011). Internal consistency alpha coefficients of .61 for the parenting distress scale, and .75 for both the childrearing stress and total stress scales have been reported (Haskett, Ahern, Ward, & Allaire, 2006). This study also provides support for the validity of both parental stress and childrearing stress scales.

2.3.5. Depression, Anxiety and Stress Scale – 21 Items (DASS-21)

The DASS-21 (Lovibond & Lovibond, 1995) is a measure of psychological wellbeing consisting of 21 questions measuring levels of depression, anxiety and stress utilising a 4-point Likert scale. Higher scores of depression, anxiety and stress indicate a lower level of psychological wellbeing. The final data analysis in this instance focused only on the depression and anxiety scores. This measure was selected as it is a brief measure, examining the three aspects of psychological wellbeing that the researchers wished to explore.

Internal reliability for the depression, anxiety, stress and overall well-being scales have been reported as .85, .76, .84 and .91 respectively (Whenan, et al., 2009). Strong internal consistency has also been reported as .94 for depression, .87 for anxiety and .91 for stress (Antony, Bieling, Cox, Enns, & Swinson, 1998). The validity of the DASS-21 as a routine outcome clinical measure has also been confirmed in a private in-patient setting (Ng et al., 2007), and in a non-clinical sample (Henry & Crawford, 2005).

2.4. Statistics
Data was analysed using SPSS version 20. Psychological wellbeing was assessed using the dependent variables anxiety (DASS subscale), depression (DASS subscale) and parent distress (PSI subscale). Challenging behaviour was selected as an independent variable as past research has identified behavioural problems as a strong predictor of parenting stress in both birth families (Hastings & Brown, 2002) and foster care placements (Buehler, Cox, & Cuddeback, 2003).

A number of statistical methods were utilised including Analysis of Variance (ANOVA) and the non-parametric Kruskal-Wallis test, which were used to explore group differences relating to psychological wellbeing, challenging behaviours and parental self-efficacy. Hierarchical Multiple Regression analyses were performed to evaluate the roles of self-efficacy and challenging behaviour on the respondent’s reported psychological wellbeing as measured by anxiety, depression and parental distress.

In testing for mediation, three regression equations must be completed. The first determines whether the independent variable significantly predicts the mediator variable, the second tests whether the independent variable significantly predicts the dependent variable, and the third tests whether the mediator variable significantly predicts the dependent variable when controlling for the independent variable. Furthermore, the mediator variable should reduce the relationship between the independent and dependent variables (Baron & Kenny, 1986).

As recommended for small sample sizes, a non-parametric bootstrapping analysis was employed to test the simple mediational model and determine whether this effect was statistically significant (Preacher & Hayes, 2008). In completing a mediation analysis, it is important to conduct a formal test of significance of the indirect effect,
such as bootstrapping, to avoid making type I or type II errors in concluding whether or not a mediation effect is present (Preacher & Hayes, 2004). As bootstrapping does not require a normal distribution, all factors including anxiety, depression and challenging behaviour scores were included in this process. In this analysis, mediation is significant if zero does not lie within the bias corrected confidence intervals for the indirect effect.

3. Results

3.1 Demographics

A total of 68 parents and 68 foster carers completed the online survey. Participants who had exited the survey without completing all responses were omitted from the study.

Table 1.

Demographic characteristics of parents and foster carers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Parents (n = 68)</th>
<th>Foster Carers (n = 68)</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>5 (7.4%)</td>
<td>8 (11.8%)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>63 (92.6%)</td>
<td>60 (88.2%)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>20 – 29</td>
<td>3 (4.4%)</td>
<td>3 (4.4%)</td>
<td>.528*</td>
</tr>
<tr>
<td></td>
<td>30 – 39</td>
<td>53 (77.9%)(^a)</td>
<td>19 (27.9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40 – 49</td>
<td>10 (14.7%)(^a)</td>
<td>27 (39.7%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 – 59</td>
<td>2 (2.9%)(^a)</td>
<td>14 (20.6%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 and over</td>
<td>0(^a)</td>
<td>5 (7.4%)</td>
<td></td>
</tr>
<tr>
<td>No. of Children</td>
<td>1</td>
<td>22 (32.4%)</td>
<td>13 (19.1%)</td>
<td>.330*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>36 (52.9%)</td>
<td>25 (36.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5 (7.4%)(^a)</td>
<td>15 (22.1%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4 (5.9%)</td>
<td>9 (13.2%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 1 outlines demographic information collected. Of the foster carers who participated, 40 per cent also cared for their own biological child or children. Twenty-nine per cent of foster carers reported that the children currently in their care had been there for four or more years. Additionally, 38 per cent of foster carers reported that the child or children in their care required intense levels of care due to a behavioural or medical condition as compared to 7 per cent of regular parents.

Chi-square tests of independence were performed to examine the relationship between participant group (foster carer or parent) and age, number of children, marital status, parenting experience, employment status, and shared responsibilities. A significant difference was observed between participant group and age ($\chi^2 (4) = 37.87, p = .000$) with more foster carers in the older age brackets as compared to parents. Foster carers also tended to have more children in their care as compared to parents ($\chi^2 (4) = 14.79, p = .005$). Furthermore, more parents were employed at the time of the survey as
compared to foster carers ($\chi^2 (4) = 17.57, p = .000$) and more parents were married ($\chi^2 (1) = 8.28, p = .004$). However no significant difference was found in the relationship between participant group and length of time caring, $\chi^2 (3) = 0.213, p = .975$.

Participants were asked to identify their top three sources of support in caring for children. The figure below outlines the answers provided.

*Figure 1. Sources of support*

Participants were also asked to identify whether the child or children in their care have been diagnosed with a formal mental health diagnosis. Foster carers reported higher levels of formal diagnoses than regular parents. These results are detailed in Figure 2.
3.2 Preliminary Analysis

Upon commencing data analysis it was identified that the anxiety, depression and challenging behaviour variables were not normally distributed. Within the general population, clinical measures of anxiety and depression are often skewed in a positive direction, as most respondents will record few symptoms (Crawford & Henry, 2003). In this situation, the scores were unable to be transformed statistically due to the presence of zero responses. Subsequently, non-parametric methods of analyses were used to overcome this failure to conform to the assumption of normality.
Table 2

*Mean and standard deviation for outcome variables*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>F value</th>
<th>$\chi^2$ value</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Carer</td>
<td>5.91</td>
<td>6.73</td>
<td>N/A</td>
<td>0.001</td>
<td>0.975</td>
</tr>
<tr>
<td>Parent</td>
<td>5.97</td>
<td>6.81</td>
<td>N/A</td>
<td>0.001</td>
<td>0.975</td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Carer</td>
<td>3.65</td>
<td>5.04</td>
<td>N/A</td>
<td>0.000</td>
<td>0.991</td>
</tr>
<tr>
<td>Parent</td>
<td>3.82</td>
<td>5.74</td>
<td>N/A</td>
<td>0.000</td>
<td>0.991</td>
</tr>
<tr>
<td><strong>Parent Distress</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Carer</td>
<td>31.28</td>
<td>9.77</td>
<td>N/A</td>
<td>1.504</td>
<td>0.222</td>
</tr>
<tr>
<td>Parent</td>
<td>29.35</td>
<td>8.50</td>
<td>1.504</td>
<td>N/A</td>
<td>0.222</td>
</tr>
<tr>
<td><strong>Self-Efficacy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Carer</td>
<td>29.60</td>
<td>5.24</td>
<td>N/A</td>
<td>0.222</td>
<td>0.638</td>
</tr>
<tr>
<td>Parent</td>
<td>29.19</td>
<td>4.93</td>
<td>.222</td>
<td>N/A</td>
<td>0.638</td>
</tr>
<tr>
<td><strong>Challenging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Carer</td>
<td>25.57</td>
<td>8.60</td>
<td>N/A</td>
<td>40.122</td>
<td>.000</td>
</tr>
<tr>
<td>Parent</td>
<td>16.06</td>
<td>5.75</td>
<td>N/A</td>
<td>40.122</td>
<td>.000</td>
</tr>
</tbody>
</table>

Results from the between-groups Analysis of Variance (ANOVA) demonstrated no significant between-group differences on the self-efficacy or parent distress scales. The non-parametric Kruskal-Wallis test was used to compare groups on anxiety, depression and challenging behaviour variables. No significant difference was observed between groups for depression or anxiety, however a statistically significant difference in challenging behaviours was observed across the two groups, ($\chi^2 (1, n = 136) = 40.122, p = .000$). Due to the lack of variance observed between foster carers and regular parents on outcome variables, it was decided that beyond correlation analyses,
further analysis would not be conducted with foster carers and regular parents as independent groups.

Pearson ($r$) and Spearman zero-order ($r_s$) correlations were utilised to explore individual relationships between the variables. Spearman correlations were used to assess relationships including depression, anxiety and challenging behaviour due to their non-normal data distribution. Table 3 outlines the correlations identified in the group as a whole.

Table 3.

**Correlation Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Parent Distress</th>
<th>Self-Efficacy</th>
<th>Depression</th>
<th>Anxiety</th>
<th>Challenging Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Distress</td>
<td>-</td>
<td>-.303**</td>
<td>.675**</td>
<td>.427**</td>
<td>.378**</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-</td>
<td>-.343**</td>
<td>-.218*</td>
<td>-.229**</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>-</td>
<td></td>
<td>.562**</td>
<td>.277**</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>.198*</td>
</tr>
<tr>
<td>Challenging Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p>.05$ (2-tailed)

**$p>.001$ (2-tailed)

When examined as separate groups, high levels of challenging behaviour reported by foster carers were positively correlated with depression ($r_s = .341$), anxiety ($r_s = .391$) and parent distress ($r_s = .452$), and negatively correlated with self-efficacy ($r_s = -.250$). Similarly, high levels of challenging behaviour reported by parents were
positively correlated with depression ($r_s = .248$) and parent distress ($r_s = .244$), but not anxiety. A negative correlation also existed with self-efficacy ($r_s = -.231$).

Self-efficacy as reported by foster carers was negatively correlated with parent distress ($r = -.319$) and depression ($r_s = -.291$), but not anxiety. Parent reported self-efficacy was also negatively correlated with parent distress ($r = -.297$), depression ($r_s = -.397$) and anxiety ($r_s = -.287$).

### 3.3 Hierarchical Multiple Regression Analysis

Hierarchical multiple regression analyses were undertaken to examine the ability of self-efficacy to predict the outcome variable (parental distress, anxiety or depression), after controlling for the influence of challenging behaviours (see table 4 a, b and c). Foster carers and parents were considered one group. Challenging behaviour was entered in the first step and explained 15.7% (parent distress), 6.1% (anxiety), and 8.4% (depression) of the variance of the respective outcome variables. After including self-efficacy at step 2, all three models improved significantly and explained an additional 5.2%, 2.4% and 6.8% of the variance in the outcome variables, parent distress, anxiety and depression respectively.

Table 4.

**a) Hierarchical multiple regression examining parental distress**

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Constant (PDIST)</td>
<td>21.631</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenging behaviour</td>
<td>.417</td>
<td>.40 (p&lt;.001)</td>
<td>.16</td>
<td>24.943</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Constant</td>
<td>35.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenging behaviour</td>
<td>.368</td>
<td>.35 (p&lt;.001)</td>
<td>.21</td>
<td>.05</td>
<td>17.541</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy</td>
<td>-.420</td>
<td>-.23 (p&lt;.001)</td>
<td></td>
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</tr>
</tbody>
</table>
b) Hierarchical multiple regression examining anxiety

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>R²</th>
<th>R² Change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Constant (ANXIETY)</td>
<td>.560</td>
<td>.25</td>
<td>.06</td>
<td>8.701</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenging behaviour</td>
<td>.153</td>
<td>.25 (p=.004)</td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Constant</td>
<td>5.881</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenging behaviour</td>
<td>.133</td>
<td>.25 (p=.012)</td>
<td>.09</td>
<td>.03</td>
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</tr>
<tr>
<td></td>
<td>Self-Efficacy</td>
<td>-.167</td>
<td>-.16 (p=.065)</td>
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</table>

c) Hierarchical multiple regression examining depression

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<tr>
<th>Model</th>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>R²</th>
<th>R² Change</th>
<th>F</th>
</tr>
</thead>
<tbody>
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<td>Constant (DEP)</td>
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<tr>
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<td>Challenging behaviour</td>
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<td>.29 (p=.001)</td>
<td>.08</td>
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<td>12.365</td>
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<tr>
<td>6</td>
<td>Constant</td>
<td>12.451</td>
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<tr>
<td></td>
<td>Challenging behaviour</td>
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<td>.24 (p=.004)</td>
<td>.15</td>
<td>.07</td>
<td>11.886</td>
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<td></td>
<td>Self-Efficacy</td>
<td>-.352</td>
<td>-.27 (p=.001)</td>
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</tbody>
</table>

As the regression analysis indicates that self-efficacy is a mediating variable due to the observed reduction in the beta coefficient after self-efficacy was added to the model, a bootstrapping method was used to test this relationship further.

Figure 3 provides an illustration of the mediation analysis process as proposed by Preacher and Hayes (2008) in which figure 3A depicts the total effect of X on Y using the unstandardized regression coefficient c. Figure 3B provides a simple mediation model in which path c’ depicts X’s indirect effect on Y, taking into
consideration the effect of the mediating variable (M) on Y. Path a is the effect of X on the mediating variable, while path b represents the effect of M on Y. Figures 4, 5 and 6 present the direct and indirect effect of challenging behaviour on parent distress, anxiety and depression respectively, and the mediating effect of self-efficacy.

In the model, the regression coefficient was observed to reduce when the mediating variable, self-efficacy, was added to the equation. However the direct path between challenging behaviour and the dependent variable continued to be significant. The results of the bootstrapping technique indicated that the indirect effect of self-efficacy as a partial mediator in the relationship between challenging behaviours and parental distress, and depression, was significant at the $p<.05$ level.
Figure 3. Illustration of direct and indirect effects of X on Y as proposed by Preacher and Hayes (2008).

Figure 4. Direct and indirect effects of challenging behaviour on parent distress.

Figure 5. Direct and indirect effects of challenging behaviour on anxiety.

Figure 6. Direct and indirect effects of challenging behaviour on depression.

Note. * p<.05 ** p<.01, *** p <.001
4. Discussion

The current study examined between group differences in foster carers and regular parents regarding psychological wellbeing, perceived self-efficacy, and their children’s challenging behaviours. The role of self-efficacy as a mediating factor in the relationship between challenging behaviours and the carer’s psychological wellbeing was also examined.

The results show that the initial hypothesis is partially supported in that foster carers experienced higher levels of challenging behaviours as compared to regular parents. This information coupled with the higher number of child mental health diagnoses validates previous suggestions that foster carers are exposed to high levels of stress (Farmer, et al., 2005) and thus may require high levels of support in their caring role. However no significant difference was observed between groups with regards to levels of anxiety, depression, parent distress and self-efficacy. Thus the hypotheses that foster carers would demonstrate lower scores on the DASS-21 and PSI-SF-4, suggesting poorer psychological wellbeing, and lower scores on the PSOC, suggesting a lower level of parental self-efficacy, were not supported.

A closer look at the DASS-21 score ranges reveals that the parent group scored in the higher ranges (severe and extremely severe ranges) more frequently than the foster carer group. There are a number of potential explanations for this outcome, including the possibility that the regular parents in this participant group had a higher level of trait anxiety as compared to the general population. Alternatively, this data may be suggesting that the current training and support received by foster carers has been effective in improving levels of self-efficacy and enabling foster carers to manage their depression, anxiety and stress levels. Unfortunately participants in this instance were not asked to provide details of training they had participated in. However when
compared to the normative sample means, both foster carers and parents were below these normative means for each scale.

Similarly, Cole and Eamon (2007) reported that foster carers experienced a low number of depressive symptoms, and suggested that agency screening and training programs had prevented those with severe depressive symptoms providing foster care, or that those with high levels of depression had chosen not to provide foster care.

In considering the group as a whole, higher self-efficacy was associated with better psychological wellbeing and with lower levels of challenging behaviour. This supports past research with both regular parents and foster carers, suggesting that self-efficacy is a protective factor in managing stressful situations and maintaining good psychological wellbeing (Kwok & Wong, 2000; Teti & Gelfand, 1991). This also suggests that parents who have high parenting self-efficacy may be utilising positive behaviour management techniques, resulting in lower levels of challenging behaviour (Coleman & Karraker, 1997). However the direction of causality in this situation cannot be determined in the current design and it is possible that parents have high self-efficacy because their child does not demonstrate high levels of challenging behaviours.

Past research with parent groups has reported that parents who rated their children as high in problematic behaviour rated themselves as less skilled and knowledgeable as parents (Mash & Johnston, 1983). Raver and Leadbeater (1999) also reported that mothers’ reported self-efficacy levels were inversely related to their perception of their child’s temperamental difficulty. Further research is warranted to explore the direction of causality relating to the relationship between self-efficacy and challenging behaviours.

The final hypothesis within this study was also supported, with self-efficacy acting as a partial mediator in the relationship between challenging behaviour and
psychological wellbeing (specifically parent distress and depression). This finding supports the results reported by Morgan and Baron’s (2011) study which observed this relationship in a foster carer only participant group. It is unfortunate that the current results did not allow for a comparison between foster carers and parents in this mediation analysis as there was no significant difference between the two groups, however it appears that this relationship exists for both groups.

It is interesting to note that less than 50 per cent of foster carers who participated in this study identified their foster care agency as one of their top three supports in providing care. Many studies have investigated foster carer support and highlighted the need for carers to feel valued and supported (Heller, et al., 2002), particularly by their foster care agency (Rhodes, et al., 2001). Thus it is important for further research to explore how to increase this number. Furthermore, both groups rated family members as a key source of support, and a higher percentage of foster carers identified their church as a key support as compared to parents. While information collected in this study is limited regarding participants’ perception of the adequacy of these sources of support, this information may play an important role in working towards improving perceived self-efficacy in foster carers.

4.1 Limitations and Future Directions

One limitation lies in the fact that these results only provide a snapshot of parent and foster carer’s perceptions of their distress, psychological well-being and parenting self-efficacy. A longitudinal study examining these factors would provide further information regarding the participant’s baseline psychological wellbeing and parenting self-efficacy, and the effects various supports and interventions have on these factors. A longitudinal approach may also provide further information about the influence of carer
stress, self-efficacy and psychological wellbeing on placement stability, parent-child relationships and long term outcomes for the child once they have left care.

As discussed earlier, a non-normal distribution of data within the anxiety, depression and challenging behaviour variables was observed. Such a skewed distribution is commonly observed in relation to the use of anxiety and depression measures in the general population (Crawford & Henry, 2003). In this instance, this difficulty was overcome through the use of non-parametric statistical analyses.

While the current study was limited by time restrictions and resources, it would have been beneficial to gather further information about the value participants place on different sources of support, and whether different types of support influence an individual’s perceived parenting self-efficacy. Additionally, further information about recent stressors experienced by foster carers, such as placement disruptions, allegations, birth family contact, foster family tensions, or conflict with the foster care agency, could have provided more detailed information about the causes of poorer psychological wellbeing, parent distress and parenting self-efficacy. Past research has explored the effect of different types of stressors, reporting that limited time to complete responsibilities predicts higher levels of depression in foster carers (Cole & Eamon, 2007), difficulty contacting support workers results in higher strain levels (Farmer, et al., 2005), and that difficulties with birth parents, foster family tensions, and disagreements with social services all result in high levels of strain (Wilson, et al., 2000).

In exploring the experience of foster carers, it would be beneficial for further research to explore between-group differences in foster carers who care for fostered children in addition to their own children, and those with only fostered children in their care. Past research has explored the experience of the children of foster carers in taking
a fostered child into the home, finding that the changes to daily life, loss of privacy and challenging behaviours associated with fostering have a significant impact on the emotional wellbeing of biological children (Hjoer, 2007). The impact of fostering on biological children has also been shown to be a contributing factor to placement breakdowns (J. D. Brown & Bednar, 2006; Martin, 1993). However it would be of interest to determine whether having birth children in the home is a protective factor to managing stress, or whether this compounds foster carer stress levels. One additional limitation of this study is the failure to consider the foster carers’ years of parenting prior to fostering, in estimating the duration of their caregiving experience. It is important to note that many foster carers have their own biological children prior to, and often during, the time they foster (Sinclair, et al., 2004).

Furthermore it is important to note that foster carers recruited for the purpose of this study were recruited from across New South Wales and Victoria. It is important to reference the information collected here against the New South Wales and Victorian foster care systems, due to the vast differences that exist between each Australian state, as stated previously. Participants were also self-selected, a factor which may have influenced the nature of the sample and the likelihood that this sample is representative of the populations from which they were drawn.

4.2 Conclusion

In summary, the current study provides support for the hypothesis that self-efficacy plays a significant role in partially mediating the relationship between children’s challenging behaviours and carer psychological wellbeing. Challenging behaviours explained 15.7%, 6.1% and 8.4% of the variance in parent distress, anxiety and depression. However when self-efficacy was added to the model, it was found to explain an additional 5.2 %, 2.4% and 6.8% of the variance in parent distress, anxiety
and depression respectively. This finding is particularly useful in developing and implementing appropriate support and training for foster carers and parents in managing parenting stressors. Despite this finding, the current research did not support the hypothesis that levels of stress, psychological wellbeing and self-efficacy would differ between regular parents and foster carers. These results suggest that further research is required to explore how the parenting tasks and experiences of parents and foster carers differ in order to develop appropriate support and training programs for these roles. Such programs are vital in ensuring the best possible short and long term outcomes for children in foster care placements.
References


Appendix 1

Children and Youth Services Review Journal Scope

and Notes for Contributors
CHILDREN AND YOUTH SERVICES REVIEW
An International Multidisciplinary Review of the Welfare of Young People

See also Elsevier Educational Research Programme home

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Appendix 2

Foster Carer Online Survey
Appendix 4

Rationale for Measures Selected

Parenting Sense of Competence Scale (PSOC)

The PSOC (Johnston & Mash, 1989) is a 17-item questionnaire which was selected for the purpose of this study to assess both parents’ and foster carers’ levels of perceived self-efficacy within their role as a parent. This widely used scale provides an evaluation of the respondent’s satisfaction with being a parent, and also their perceived competence within their role. One particular benefit of this measure is the fact that the items included are relevant to parents caring for children in a broad age range (Rogers & Matthews, 2004). This is important in the current study as the age of children being cared for ranged from infants to 17 year olds.

Alternative measures for parenting self-efficacy include the Maternal Self-Efficacy Scale (Teti & Gelfand, 1991), and the Difficult Behaviour Self-Efficacy Scale (DBSES) (Hastings & Brown, 2002). While widely used, these measures were designed for specific groups, rather than providing a general measure of parenting self-efficacy.

Parenting Stress Index – Short Form (PSI – SF- 4)

The PSI-SF-4 (Abidin, 1995) is a 36-item questionnaire measuring the level of stress associated with parenting. Three sub-scales are included relating to parental distress, parent-child dysfunctional interaction, and child difficulty. It is theorised that viewed together or alone, these subscales can indicate negative parenting behaviour which may result in poor child outcomes and development (Sheppard, McDonald, & Welbourne, 2010).
This measure was selected for the current study due to its use in past research involving both foster and biological families, and the fact it was designed for parents caring for children with behavioural and emotional difficulties (Morgan & Baron, 2011). The short form version was also selected for participants’ convenience.

**Depression, Anxiety and Stress Scale – 21 Items (DASS-21)**

The DASS-21 (Lovibond & Lovibond, 1995) is a 21-item measure of psychological wellbeing assessing levels of depression, anxiety and stress. Poor psychological wellbeing is indicated by low scores on each scale.

The DASS-21 was selected for the current study for a number of reasons including brevity, self-report format, and clinical ease of use. The DASS is a widely used measure of psychological wellbeing, with strong support for the psychometric properties of the assessment itself (Antony, et al., 1998; T. A. Brown, Chorpita, Korotitsch, & Barlow, 1997).