



Stress, Anxiety and Depression Among Parents of Children With Autism Spectrum Disorder

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In a replication of a previous study of the incidence and contributing factors in anxiety, depression and stress in Victorian parents of a child with autism spectrum disorder (ASD), a sample of 107 Gold Coast parents completed a questionnaire that assessed their demographic backgrounds, anxiety and depression scores on standardised inventories, and also tapped several aspects of those factors that may have contributed to their wellbeing. Over 90% of parents reported that they were sometimes unable to deal effectively with their child's behaviour. Nearly half of the participants were severely anxious and nearly two thirds were clinically depressed. Factors that emerged as significant in differentiating between parents with high versus low levels of anxiety and depression included access to family support, parents' estimation of family caregivers' expertise in dealing with the behavioural difficulties of a child with ASD, and parental health. Parents' suggestions for personal support services are reported, and some comparisons across the data from the two states are made, with suggestions for further research into parent support mechanisms.

It has been consistently commented that parents of children with autism spectrum disorder (ASD) experience greater levels of stress, anxiety and depression than parents of children without this particular developmental disorder (e.g., DeMeyer, 1979; Fisman, Wolf, & Noh, 1989; Harris, 1984; Koegel et al., 1992). While there are multiple possible causes of this heightened level of distress, the major factors appear to be associated with unlikely remission of the autism-based behaviours that cause social criticism (Liwag, 1989), the lack of wider understanding among the public about the nature of ASD (Fisman, Wolf, & Noh, 1989), the negative effects on the marital relationship (Piven, Chase, Landa, & Wzorek, 1991), and the reduced care that can be provided to the siblings of the child with ASD (Holroyd, Brown, Wikler, & Simmons, 1975). In addition, low levels of available social sup-

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port for the parents of a child with ASD can further contribute towards the distress they experience daily (Gray & Holden, 1992; Konstantareas & Homotadis, 1989).

Social support for parents of children with ASD has been shown to significantly influence the self-reported levels of stress experienced by mothers (Konstantareas & Homotidis, 1989), leading Koegel et al. (1992) to argue for implementation of structured social support programs for these parents. With particular reference to Australian families, Gray and Holden (1992) suggested that there was also a need for further research into the role that social support played in the alleviation of parental stress. Although not always within the definition of social support, respite care can afford parents the opportunity to escape from the demands of parenting via support from informal and formal agencies. This support may take the form of relatives, siblings, grandparents or social agencies funded by governments or charities. Of particular relevance in assessing the benefits of such respite care is the degree of expertise in regard to ASD that alternate caregivers possess, with the possibility that low levels of caregiver expertise may actually contribute to parental distress by allowing a situation to develop in which poor behaviour management skills and strategies are implemented during the parents' absence, with consequence of extra demands upon parents when they resume primary caregiver roles.

Some other factors that have been demonstrated as linked with parental stress include the age of the child with ASD (parents of older children show higher levels of stress than parents of younger children: Holroyd, Brown, Wikler, & Simmons, 1975), and the age of diagnosis (later diagnosis is associated with higher depression levels; Gray & Holden, 1992).

In a previous study of the prevalence of stress, anxiety and depression among Victorian parents of a child with ASD, we investigated the effects of a range of potentially causal factors, and concluded that parents of children with ASD showed elevated levels of anxiety and depression compared with the normal population, parents with access to other family members for assistance in childcare had generally lower stress than parents who did not have such access, there were significantly lower levels of anxiety and depression among parents who considered that their family members who gave them assistance had a 'clear understanding of the child's difficulties and needs' than among parents who considered that their family supporters did not have such expertise, and finally that parents with an illness or disability reported significantly higher anxiety, depression and stress than parents who were healthy and/or did not have a disability. There were no significant effects according to the age of diagnosis or the age of the child during the survey (Sharpley, Bitsika, & Efremidis, 1997).

However, while those data are valuable in understanding the ways in which parents of children with ASD are affected by the demands placed upon them, they are restricted to one particular geographical and socioeconomic section of Australia (i.e., Victoria). In addition, the data were collected five years before those reported in the present article. Therefore, there may be some limit to the generalisability of the data reported by Sharpley, Bitsika and Efremidis (1997), and the present study addressed that issue of generalisability by collecting data in 2002 from parents of children with ASD who lived on the Gold Coast in Queensland.

■ Method

Participants

Two procedures were used to mail out a total of 534 questionnaires to the same number of families with a child with ASD on the Gold Coast in Queensland. The first procedure consisted of sending 210 questionnaires out in a newsletter from the Gold Coast ASD Support Group. The second procedure consisted of sending the questionnaire out to 324 families who had a child with ASD in a specialist school or a special education unit in a mainstream school, or in a regular classroom. From these 534 questionnaires, 107 (20.0%) parents (101 females) returned the questionnaire in useable form. Of these, 97.2% were biological parents of the ASD child in question; three identified themselves as step-parents. Although the return of questionnaires was lower than the rate anticipated, it is not considerably less than is common for confidential and anonymous questionnaire surveys of this sort, and was almost identical to that recorded for the previous study we conducted in Victoria several years ago (Sharpley, Bitsika, & Efremidis, 1997). As for that initial Victorian data, generalisability across other geographic and socioeconomic samples is not guaranteed, but there is no reason to conclude that the data are not acceptable according to the usual standards applied in this form of survey research.

Instruments

Standardised tests for anxiety and depression were used to measure the dependent variables under investigation in this study. These were the Zung Self-Rating Anxiety Scale (SAS; Zung, 1971) and the Zung Self-Rating Depression Scale (SDS; Zung 1965). Both the SAS and the SDS possess validity because of their construction on the basis of DSM-II diagnostic criteria (i.e., both somatic and cognitive/emotional symptoms, such as worrying, feeling hopeless, sleeplessness, lack of enjoyment of life, muscle tremors, stomach churning, sweating and increased frequency of urination). Reliability data for the SAS is satisfactory at 0.71 (split half; Zung, 1971), and a coefficient alpha of 0.85 has been reported (Zung, 1980), indicating acceptable levels of internal consistency. Similarly, the SDS has been shown to possess split half reliability of 0.73 (Zung, 1973) and alpha coefficients between 0.86 and 0.90 (Schaefer et al., 1985). However, these standardised instruments are designed to be applied across a range of contexts with a range of individuals, and therefore a three-part questionnaire specific to the population being sampled in this study was designed and employed here, and this is described below.

The first section of the questionnaire was used to gather demographic data about the child with ASD, and contained items which tapped various aspects of the child's disorder, age, gender, school placement and family structure. The second section gathered data on the kind of school the child with ASD attended, the support available there and elsewhere, and the parents' evaluation of various aspects of those services. Parents were also asked what kind of difficulties they experienced with their child, how confident they felt in handling these difficulties, and their concerns for their child's future. Of particular significance was a questionnaire item which asked parents to judge whether the assistance they received from within or outside the family was provided by people who had a 'clear understanding of your child's difficulties and needs'.

The third section of the questionnaire asked parents about their own background (gender, age, employment status of parents, relationship to child if not parent, if they suffered from any illness or disability and whether any medication was being taken because of this) and what form of assistance for dealing with the child's needs was available from within and outside the immediate family. As mentioned above, three questions were designed to assess parents' stress in more specific ways than via the SAS and SDS. These questions were designed after consultation with a small group of parents of children with ASD and some special education teachers and psychologists who had an established history of working with ASD children, and were used in the previous study in Victoria. Parents were asked to use a number of 10-point Likert scales to rate (a) their degree of confidence in handling their child's current major difficulty, and (b) their average daily level of stress arising from parenting their child with ASD. Parents were also asked whether there were times when the 'caring of your child stretches you beyond your personal limits' and, if so, how many times they felt this way per month. Together with the SAS and SDS, these measures constituted the dependent variables used to assess parental wellbeing according to the influence of the independent variables listed above. Because of the different nature of the independent variables (i.e., age of child, age of diagnosis of ASD, gender of parent completing questionnaire, presence and expertise of social/familial support, parental illness or disability), these were tested for their effects on the dependent variables of parental wellbeing via a series of MANOVAs. This procedure was designed to elicit the most comprehensive analysis of the independent variables (i.e., by allowing for stronger conclusions than those obtainable from regression procedures used by some previous researchers such as Gray and Holden, 1992), while minimising the chances of type I and type II errors.

The procedures followed in this research were approved by the Bond University Human Research Ethics Committee.

■ Results

Although the primary purpose of this study was to examine the levels and causal factors associated with stress, anxiety and depression among Gold Coast parents of a child with ASD, comparisons with the previous Victorian data may also be of value. This comparison will be addressed in two ways. First, by presenting the Victorian data in italics with the Gold Coast data, and secondly by commenting upon these comparisons in the discussion section of this paper.

Data Regarding the Children

The age of children with ASD whose parents were sampled ranged from three years to 19 years (3–33), with 37.7% (75%) being less than nine years of age. The age of diagnosis also ranged widely (from 1 to 16 years; 1–21), but 38.7% (79.8%) had been diagnosed between two and five years of age. As documented from the ASD literature, most children (81.1%; 82.3%) were male. Nearly all (86.0%; 90.9%) of the children had siblings and, in 19.6% (17.3%) of cases, these siblings also had a physical condition (e.g., epilepsy, diabetes, heart condition), intellectual impairment (e.g., Down Syndrome and learning disability) or developmental disorder (e.g., ASD and Asperger Syndrome).

The most common educational setting for children of school age was mainstream schooling with a special education unit (38.3%), followed by specialist school (29.0%), then mainstream school minus a special education unit (21.5%; *Victorian children were mostly in specialist schools [48.6%] and mainstream schools [37.7%]*). Of those who were in mainstream schools, 83.3% (88.6%) had acquired some level of assistance from a teacher's aide. No significant main effect was found with respect to the type of school setting attended by the child with ASD and parental anxiety, depression and stress ($F[3, 102] = 1.409, ns$). However, the data did indicate that attendance at a special school was associated with significantly lower parental daily level of stress from parenting the ASD child ($F[1, 98] = 4.565, p < .05$). The number of hours of teacher aide time received by the child while attending a mainstream school was also investigated as a variable affecting parental wellbeing, but no significant main effect was found ($F[3, 62] = 1.014, ns$).

Almost one quarter (21.5%; 50%) of the respondents used available respite care services. These services were most likely to be provided in settings external to the family home (95.2%; 36.3%), whereas 4.8% (32.7%) of respondents reported having access to in-home respite care services. Regarding the 78.5% of respondents who stated they did not receive any respite care for their child with ASD, the greatest proportion (43.2%) deemed the available services as not being necessary for their family, while almost one in five (18.9%) did not currently have access to respite services due to lack of knowledge about them. Most parents (49%; 59.1%) also received some other form of assistance in meeting the needs of their child with ASD. This assistance was most commonly parent funded and provided by private practitioners (39.1%; 27.6%), followed by assistance offered by government agencies (32.6%; 47.7%), or nongovernment sources (28.3%; 27.6%).

The major current child-management difficulties experienced by parents were behavioural difficulties (37.7%; 35.9%), followed by cognitive/learning difficulties (20.8%; 5.5%), poor communication skills (15.1%; 7.3%) and lack of independent functioning (9.8%). These data clearly indicate that everyday management of their children's behaviour was a prime source of stress for these parents. The degree of confidence that parents experienced in dealing with these major current difficulties varied from low to high (*low* = 19.0% [29.7%], *average* = 33.4% [26.8%] and *high* = 47.6% [43.5%]).

Data Regarding the Parents

Most respondents were female (94.3%; 64.4%), and nearly all (97.2%; 97.3%) were biological parents of a child with ASD, with the rest being step-parents of the ASD child. Parental age ranged from 24 years to 72 years of age, with most respondents (57.75%) being under the age of 45 years. In most families (47.1%) only one parent was employed full-time, while in 44.1% of cases both parents were fully employed outside of the home setting. The majority of parents (90.5%; 81.9%) reported that sometimes they were unable to deal effectively with their child's behaviour and, as a result, felt stretched beyond their personal limits. At these times, they reported feeling *angry/frustrated* (35.6%), *inadequate* (12.2%), *depressed* (10%), *isolated and lonely* (4.4%), or *grief-stricken* (2.2%). (*Unable to cope* [52.2%], *anxious and stressed* [13.3%], *depressed* [9.9%], *isolated and lonely* [3.0%], *blamed themselves* [1.5%] or *awful* [.5%]). Nearly half (48.9%; 46.4%) of those parents who reported feeling

stretched beyond their limits mentioned they felt this way from one to six times per month, with 13% (18.7%) feeling stretched beyond their limits between six and 10 times per month. However, 38.1% of parents felt this way more than 10 times each month (i.e., an average of every three days), suggesting that feeling stretched beyond their limits was a relatively frequent experience for more than one third of the parents. Parents experienced a wide range of levels of daily stress from parenting their child with ASD, ranging from *very low* (2.9%; 6.6%), *low* (4.8%; 3.2%), *average* (21.9%; 36.9%), *high* (48.6%; 40.4%), and *very high* (21.9%; 10.5%), with a clear skew to the above average side of the distribution.

In addition, although 17.1% (41.8%) of parents scored in the *moderate anxiety* range on the SAS, 18.1% (18.6%) were *highly anxious*, and a further 47.6% (9.1%) were *severely anxious* according to Zung's (1980) recommended scoring methods. These data represent a higher prevalence rate for anxiety than the 9% reported by Zung (1980) for a normal adult population. In relation to depression, 21.0% (13.2%) of parents reported symptoms of 'moderate depression', 27.6% 'high depression' and 11.4% (5.9%) of parents scored within the 'severely depressed' range, giving a total prevalence rate of 60% (18.1%) of parents experiencing depressive symptomatology. This figure is higher than the reported prevalence rate of approximately 15% for a general Australian population (Byrne, 1980). It is therefore of interest to examine which factors might identify and distinguish those parents who had high levels of daily stress, anxiety and depression from those who had lower levels of these negative outcomes of parenting. All the statistical analyses reported below were conducted via a series of MANOVAs.

Gender of Parent

No valid testing for gender trends was justified because of the preponderance of females in the sample (94.3%). (Females were significantly more anxious, more depressed, and reported being stretched beyond their limits more times per months than males, although the latter results did not reach statistical significance).

Access to Other Family Members for Assistance Regarding Child Care

Of the parents sampled, 48.6% (61.5%) reported that they had access to other family members for assistance in child care. Of those parents who did not have access to family assistance, most cited distance and *lack of interest* of extended family members (66.0%) as factors which prevented those people from becoming involved in the care of the child with ASD. Approximately 8.8% of parents reported that extended family members perceived them as not needing assistance in handling their ASD child. The sources of assistance were most often grandparents (68.3%; 52%), followed by aunts and uncles (11.1%; 23.8%) and older siblings (11.1%; 19.4%). There were no significant differences in parental wellbeing according to the relationship between parents and the family members who gave assistance ($F[3,112] = 0.92, ns$; *same finding as for Victorian parents*). Access to other family members for child care (vs. no such access) was associated with nonsignificantly lower frequency per month of feeling stretched beyond personal limits (access parents = 7.1 [6.04], nonaccess parents = 3.5 [6.51]), anxiety (SAS raw scores: access parents = 39 [34.86], nonaccess parents 40 [36.06]), and depression (SDS raw scores: access parents = 43 [37.97], nonaccess parents = 45 [39.82]) scores, and daily level of stress from parenting (access parents = 6.10 [6.12], nonaccess parents = 6.50 [6.53]).

Level of Understanding of Child's Difficulties by Other Family Members to Whom the Parents Have Access for Assistance

An additional examination of the effects of support offered by family members (specifically the relationship between parental wellbeing and the presence of perceived expertise as caregivers to a child with ASD of those family members who were accessible) was conducted by asking parents if they considered that the other family member who contributed to child care had a 'clear understanding of your child's difficulties and needs'. As previously mentioned, this item had been developed and tested on a sample of parents before inclusion in this and the Victorian questionnaire. More than half (56.9%) of those parents who received assistance from other family members in caring for their ASD child reported that these family members did not have a clear understanding of the their child's individual needs. In order to investigate the relationship between parental wellbeing and the presence of perceived caregiver expertise, a one-way (perceived clear understanding as the independent variable) MANOVA was conducted on the parental wellbeing dependent variables. Results indicated a significant main effect for the presence/absence in assistant caregivers of a 'clear understanding of the child's difficulties and needs' ($F[5,82] = 3.895, p < .05$), with significant univariate effects for SAS scores ($F[1,87] = 5.674, p < .05$), and SDS scores ($F[1,87] = 5.856, p < .05$; *as for the Victorian study*). These differences were in the expected direction, suggesting that greater parental perceptions that family members who cared for the ASD child understood this child's difficulties were significantly associated with lower levels of anxiety and depression arising from caring for a child with ASD, and a greater level of confidence in dealing with their child's major difficulty. As previously mentioned, this trend is present irrespective of the relationship of those family members with the parent. The trend remained stable when caregivers were grandparents, aunts, uncles or older siblings.

Parental Health

Of the 19% of parents who reported that they suffered from an illness or disability which, in their view, 'hinders your ability to be an active parent to your child' with ASD, 73.7% had a physical illness or disability and 26.3% had a psychological disorder. A significant main effect was found for the presence or absence of parental illness and disorder ($F[3,99] = 8.745, p < 0.05$), with parents without an illness or disorder having significantly lower levels of anxiety, depression and stress from parenting a child with ASD (*as for the Victorian sample*).

Age of Child and Age of Diagnosis

As for the Victorian data previously reported, neither of these two independent variables (age of child now and age when ASD was first diagnosed) showed any significant main or univariate effects on any of the dependent variables.

Parental Access to Counselling and Stress Management Services (This factor was not sampled in the previous study.)

Most parents (76.4%) who completed the survey questionnaire reported that they did not have access to services designed to offer direct support to them. The recorded reasons for lack of use of support services by parents included lack of knowledge that parent support services existed (35.6%), financial limitations (16.4%), no need (13.7%), time restrictions (8.2%), and not certain that this support would be of

TABLE 1**Percentage of Parents That Require Particular Services Very Much.**

Services required	Percentage
Behaviour management	16
Stress management	14
Parent support group	13
Personal counseling	13
Health and exercise training	12
Communication training	12
Assertiveness training	12
Marital counseling	6

assistance (6.8%). Of those parents (23.6%) who did have access to such services, the majority (47.8%) received them individually, either as part of a broader intervention program or within a private setting. No statistically significant main effect or univariate effects were obtained with respect to access or nonaccess of parents to counselling/stress management services, although the validity of the statistical analyses should be considered as limited because of the disparity in the sizes of the two independent variable samples. The issue of service provision for parents was further investigated by asking respondents to identify the types of services they believed would be of benefit to them. Table 1 presents the percentage of parents who indicated they required particular services *very much*. Other services listed by parents that they would like included housekeeping, babysitting/Big Brother Program, sibling information groups, long-term support and conflict resolution.

■ Discussion

The data collected on a Gold Coast sample of parents of a child with ASD replicate in general those previous findings that reported that parenting a child with ASD is associated with elevated levels of anxiety, depression and stress when compared with the normal population. Although about four out of five children with ASD had accessed some teacher's aide assistance in the classroom, neither the number of hours accessed nor the attendance at a special school were significantly associated with lower parental anxiety, stress and depression levels, but attendance at a special school was a significant factor in determining parents' daily stress levels from parenting their child with ASD.

Parental access to available respite care was restricted to about one quarter of the sample, with the majority of the rest of the parents commenting that they did not see the available services as necessary. About half of the sample accessed some form of support, most commonly in the form of private practitioners funded directly by parents, although about one third of parents accessed assistance provided by government agencies and over a quarter accessed nongovernment sources. When asked about the kinds of difficulties they faced with their children with ASD, most parents rated behavioural difficulties as most challenging, followed by cognitive/learning difficulties, poor communication skills and lack of general independence. Thus, the everyday

management of their children's behaviour remains a major concern for this parental group, with about one in five parents stating that their self-confidence in dealing with these daily behavioural difficulties was 'low'. Of interest is that nearly all parents (over 90%) commented that they were sometimes unable to deal with their children's behavioural difficulties and were consequentially stretched beyond their abilities, feeling angry and frustrated, inadequate, depressed, and isolated and lonely. It is of importance to report that nearly 40% of the parents sampled here felt stretched beyond their personal limits about every three days.

Perhaps because of this acknowledged inability to deal effectively with the demands they experienced from their child with ASD, nearly half met Zung's criteria for severe anxiety, about five times the level of the general community. In addition, nearly two thirds of these parents reported that their depression levels were clinically significant according to Zung's criteria, about four times that reported for the general population in Australia. Contributing factors were not associated with access to family members for assistance, but were significantly associated with the parents' perceptions of the expertise of the family caregiver, with both anxiety and depression being higher in parents who held a poorer opinion of their caregivers' expertise. A similarly significant effect was noted for parents who had a physical disability or illness/disorder. Although no significant difference was noted for parental access to personal counselling or stress management services, nearly two thirds of the sample did not have such access and therefore this comparison should be viewed as of limited validity. Interestingly, over one third of these parents considered that such personally supportive services were unavailable to them.

Because of the preponderance of females in the sample, valid comparisons across genders were not justified. Similarly, with nearly all parents being biological rather than step-parents, no justifiable comparisons could be made on that factor either.

Although not a major focus of the present study, the cross-state comparisons that may be made are of some interest (although they should be made with some caution due to the lack of direct comparability of the demographic natures of the two samples). They will be briefly summarised here, though only major differences will be commented on, with the detail of the data being presented in the results section of this paper. A first indicator of the limitations in making direct comparisons across the two sets of data is the age of the children with ASD, with the Victorian sample having a group of children much older than the Gold Coast sample. Similarly, while nearly 39% of the Gold Coast sample had had their children with ASD diagnosed before the age of five, over twice (nearly 80%) that proportion of Victorian children had been diagnosed by that age. Since early diagnosis has been shown to be a strong indicator of a reduction in severity of later behavioural difficulties, it is reasonable to assume that the Gold Coast parents may have been under greater strain than their Victorian counterparts. This surmise was supported by the data on the SAS and SDS, where nearly half of the Gold Coast sample achieved Zung's criteria for a clinically significant diagnosis, but less than 10% of the Victorian parents similarly qualified. A parallel finding was noted for depression, with over 60% of the Gold Coast parents meeting Zung's criteria for a depressive diagnosis, but less than 20% of the Victorian parents falling into this category. Both sets of parents were well above the normal population levels for anxiety and depression.

Perhaps one factor that might have contributed to the higher levels of anxiety and depression in the Gold Coast sample is the finding that, while over half of the Victorian parents accessed available respite care services, less than one quarter of the Gold Coast parents did so. Further, while nearly one third of Victorian parents accessed these services in their own homes, less than one in 20 Gold Coast parents were able to do this. Because of its recency as a major population centre, the Gold Coast is often reported to lack the strong family support networks that typify more established cities, and this may explain some of the differences reported on this factor. Evidence for this are the data on the source of assistance, with less than half of Gold Coast parents accessing other family members but nearly two thirds of Victorian parents doing so. Of importance is the finding that, regardless of the state where the data were collected, over 80% of Victorian parents and 90% of Gold Coast parents of a child with ASD reported that they were stretched beyond their limits in dealing with the behavioural demands of their child. Clearly, wherever the parent lives and whatever the source of assistance they access, that assistance is not sufficient to allow them to function as do parents of nondisabled children. There are implications in these findings for the siblings of the children with ASD who appear to have less access to parental attention due to the intensity of the ASD child's difficulties. As for the Victorian parents, Gold Coast parents were less anxious and depressed if the family member(s) whom they accessed for assistance had, in the parent's opinion, reasonable expertise in understanding and dealing with the ASD child's difficulties. Both samples showed that parental illness and/or disability or disorder further complicate and reduce the effectiveness of parents' coping.

Because both sets of parents' data suggest that parents themselves are also suffering because of the demands of parenting a child with ASD, the extension of the previous study in terms of parents' preferences for personal assistance is of relevance to the development of more effective services for children with ASD and their parents. Over three quarters of the Gold Coast sample indicated that they did not have access to the kinds of services they sought for their own personal wellbeing, with over one third being unaware of such services, and another quarter either being unable to pay for them or not having the time to attend them. Less than 14% of Gold Coast parents considered such services unnecessary. Nearly half of those parents who did receive such services did so on an individual basis, suggesting that the service was more likely to be personally supportive rather than instructional about the child's behaviour. Although valid statistical comparisons across parents who did/did not access personal support services was not possible due to the nature of the data collected here, when asked what kind of service they would prefer, 16% listed behaviour management (i.e., to help them cope with their children's behaviour) but 52% listed services that were clearly focused on their own wellbeing (i.e., stress management, parent support groups, personal counselling, and health and exercise training). These parents' needs may well directly influence their ability to cope with their children's behavioural difficulties and thus become more than simply parental support, but instead achieve the status of being a foundation of effective child behaviour management.

As for the previous study conducted with parents in Victoria, the data from the present study are limited in their generalisability to other parts of Australia. However, there are some common findings, and these have been commented on

above. Further research could gather similar data from a national survey, so that any geographical differences could be defined more clearly. Of perhaps greater importance is the issue of development and evaluation of parental support services. While these already exist in an general and informal manner, there is a need to devise and evaluate specific parent support groups. We have previously reported our earlier attempts at this (Bitsika & Sharpley, 1999, 2000), and will be shortly reporting data from a more recent study of the effectiveness of a parent support group for those people who provide the primary care for children with ASD.

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