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Stress and Age: A Comparison of Asian American and Non-Asian American Parents of Children with Developmental Disabilities

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Abstract This study examined parental stress differences between Asian American and non-Asian American parents of children with developmental disabilities (DD). This study also explored correlations of the age of children with DD and the age of their parents with the level of stress in these parents. Participants were administered the Parental Stress Index and a general questionnaire. Both groups reported high, comparable stress levels. However, Asian American parents experienced a significantly higher level of stress that was related to children's characteristics of disability than their non-Asian counterparts. Results also indicate that while the age of children with DD is the best correlate of parental stress for non-Asian American parents, the age of parents is the best correlate of parental stress for Asian American parents. Implications of the findings for social work practice are discussed.

Keywords Asian Americans · Developmental disabilities · Parental stress · Age

Over four million people in the U.S. are diagnosed with development disabilities (DD) which include autism spectrum disorder (ASD), cerebral palsy (CP), mental retardation (MR), vision impairment, and hearing loss occurring before a person reaches 22 years old (Administration on Developmental Disabilities n.d.; Center for Disease Control and Prevention n.d.-a). The Center for Disease Control and Prevention (n.d.-b) estimates that 17% of children under 18 years old are affected by permanent mental and/or physical impairments associated with DD. Approximately

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65 to 80% of persons with DD live with family members (Obloy and Hutcheson 2002; Washington State Department of Social and Health Services n.d.).

Necessity of family care for persons with DD has been strongly advocated by scholars and politicians in the past several decades. Wolfensberger and Zauha (1973) insisted that persons with DD have a right to a normal life and that family living should be the basic pattern of this normal life. LeFley (1987) also argued that individuals with disabilities would do better in environments in which the family was involved in the rehabilitation processes. Even some governmental initiatives (e.g., P.L. 99–457 and P.L. 102–119) have required the involvement of parents in early intervention services (Lubetsky et al. 1995). More recently, Bryson and colleagues provided data to demonstrate the importance and effectiveness of involving parents in implementing pivotal response treatment for young children with autism spectrum disorders (Bryson et al. 2007).

If family care for persons with DD is a valid value, then, how can the family care process be improved and supported? Research has indicated that many parents who take care of their children with DD encounter tremendous stress, exhibiting symptoms of emotional exhaustion, anxiety, pessimism, and depression. Some primary developmental disabilities causing significant level of parental stress are ASD, MR, CP, Down's syndrome, seizures as well as learning disabilities (Chan and Sigafos 2001; Fisman et al. 2000; Hodapp et al. 2001; Huang et al. 2005; Konstantareas and Homatidis 1989; Olsson and Hwang 2002; Pruchno and Meeks 2004). Therefore, understanding the sources, level and pattern of stress experienced by parents of children with DD can help social service providers identify needed services to address existing issues experienced by these families (Birenbaum and Cohen 1993; Hodapp et al. 2001).

Literature Review

According to Dyson (1991), social and economic advantages do not prevent or diminish the impact of parental stress associated with caring for a child with DD. Stress of caring impacts the majority of parents of children with DD across SES levels. Research further indicated that pairs of mothers and fathers raising a child with MR experienced similar parental stress levels (Dyson 1997). Poor marital relationship is a significant factor that contributes to higher stress levels among parents of children with DD (Kersh et al. 2006). It is also important to note that disability type may impact parental stress levels. For example, Sanders and Morgan (1997) determined that parents of children with autism tended to have higher stress levels compared to those with a Down's syndrome diagnosed child. Autistic behavior problems were deemed as a significant contributor to parental stress. Parental stress levels greatly escalated with the severity level of the child's disability (e.g., autism, Down's syndrome, CP). In addition, stress level rose when the disability was coupled with behavior problem as well as during times of caretaker task management. Helping and supervising the child at mealtimes, bedtime, cleaning up after the child and toileting supervision were all positive predictors of increased stress (Plant and Sanders 2007). Parenting stress escalated to excessive levels when a child with ASD exhibits behavior problems (Osborne and Reed 2009).

Culture and Parental Stress

Although there is an increased awareness of the reality of parental stress in caring for persons with DD, research on cultural factors related to parental stress is rare (Cho et al. 2000; Huang et al. 1998; Ryan and Smith 1989). As Kwok and Wong (2000) stated, “Culture may have also played a part in the stress experienced by some parents. This is an area that has not been fully explored. Nor has this information been put to use in educating parents on effective child-rearing practices” (p. 63). Slavin, Rainer, McCreary, and Gowda (1991) also argued that stress must be understood from culture-relevant dimensions. Research has found similarities and differences in parental stress between Hispanic families that have a member with DD and their non-Hispanic white counterparts. Even though both groups experienced significant stress levels within their caregiver roles to children with MR, Hispanic families had stronger religious values and perceived caring for their family member as less of a burden than the Caucasian caregivers (Heller et al. 1994). Cultural factors could affect how parents of children with DD perceive the stressfulness of events, available resources, manifest maladaptive behaviors, and select coping strategies.

Unfortunately, while some efforts have been made to investigate parental stress in minority parents of a child with DD (e.g., Cho et al. 2000; Heller et al. 1994; Smith and Ryan 1987), few systematic studies have been undertaken to answer relevant research questions. In particular, there has not been enough empirical research on cultural differences in parental stress of Asian American parents of children with DD. For that reason, Huang et al. (Huang et al. 2005) examined the stress pattern of Asian American parents of children with DD (i.e., MR, Autism, CP and seizure disorders). Their finding indicated that Asian American mothers experienced a significantly higher stress level than did Asian American fathers. They recommended that future studies should compare the stress of Asian American parents with that of non-Asian American parents of children with DD. Additionally, it is invaluable to examine specific variables that correlate with the stress experienced by Asian American parents with DD children.

Age and Parental Stress

Existing research has found that age factor significantly correlates with stress in non-Asian American parents of children with DD. Collins-Moore (1984) inferred that older parents, those 40 years and older, might worry more about providing for the needs of their child with a disability in later life. On the other hand, younger parents are likely to encounter both negative developmental and social implications in response to their child's disability. For example, Konstantareas and Homatidis (1989) found that parents of children with a learning disability who are less than 40 years old experienced greater child adjustment problems and concomitant parental stress. One explanation was that these younger parents might have less confidence in their parenting ability and therefore tended to have a more negative perception of their children. Oh, Rubin, and Mouw (1994) utilized a trend analysis revealing that a significant quadratic relationship existed between the maternal age (mean=41.4) of a total of 135 mothers of children with MR (children's mean age=13) and parental adjustment level in South

Korea. When the age of mothers of children with MR was about 42, the parental adjustment level (PAL) score was at 60, its highest point. Mothers who were younger or older than 42 years old experienced a lower level of maternal adjustment to their child with MR. In sum, mothers reported the lowest PAL scores during the following periods of times when they (a) find out about the disability of their child, (b) make the decision whether to send their child to a regular or special school program, (c) make transition plans at the point when their child leaves the school system, and (d) realize they have become older and are unable to take care of their child.

Evidence from empirical research also indicates that stress level experienced by parents of children with DD will change as their children get older. Nereo, Fee, and Hinton (2003) investigated parental stress in mothers of boys with Duchenne Muscular Dystrophy. Over time, maternal stress related to the child variable went down. Per the authors' analyses, one of the most significant contributors to parental stress was the disabled child's behavior problems. Since the level of child difficult behaviors decreased over time, the level of stress experienced by their parents tended to diminish as well. In a longitudinal study conducted by Baxter et al. (2000) on parental stress attributed to family members with and without moderate to severe MR, parents of children with MR were interviewed twice in a 7-year period. It was found that the child variables "behavior at home," "behavior in public," "speech," "intelligence," and "obtaining help" were significantly less worrying for parents at time 2 than at time 1, suggesting that there was a general trend for less stress to be reported by parents as their children with DD became older (Baxter et al. 2000). Since most of the aforementioned studies were conducted among non-Asian American participants, it is worthwhile to examine if their findings about the intensity of parental stress and age factor can be applied to Asian American parents of children with DD as well.

Therefore, the purpose of this current study was to examine the stress level and pattern among Asian American and non-Asian American parents of children with DD. More specifically, the following two research questions were addressed: (a) Does the stress level of Asian American parents of children with DD differ from their non-Asian American counterparts? (b) Are the ages of children with DD and their parents significantly related to parental stress of Asian American and non-Asian American parents of children with DD?

Methods

Participants

An Asian American community organization with 600 parents of children with DD were contacted via mail to attend a one-day Asian American parenting conference focusing on DD issues. A total of 48 parents of children with DD voluntarily participated in the survey (21 Asian Americans, 27 non-Asian Americans). The Asian American parent sample came mainly from the audience attending a Northern California Conference of Asian American Parents of Children with Developmental Disabilities. Originally 36 Asian American parents completed the questionnaires. Only one respondent per family was invited to respond. These parents consisted of 16

Chinese Americans, 5 Japanese Americans, 5 Vietnamese Americans, 2 Filipino Americans and 2 Korean Americans. Six parents were in the category of “others” (e.g., other countries in Southeast Asia). Since this study focused only on children with DD, 15 of these questionnaires were disqualified because their children were older than 18 years old. Of the 21 retained Asian American participants, 12 were mothers and 9 were fathers. Their average age was 42 (SD=12.2). The average age of their children with DD was 7 (SD=3.8). The type of disabilities experienced by these children included MR (4), autism (8), CP (2), and seizure disorders (2). Five children were in the “other” category (e.g., dually diagnosed).

The non-Asian American parent sample was recruited from the consumers of the Department of Children and Family Services (DCFS) at a county office in Georgia. According to the staff of DCFS, these consumers approached the DCFS for issues such as food stamps rather than child abuse or neglect. Only one respondent per family was invited to respond. Thirty questionnaires were originally collected. Of these questionnaires, 3 were completed by grandparents of children with DD and therefore were excluded from this study. Of the 27 parents of children with DD, there were 26 mothers and one father. Their average age was 33 years (SD=6.3). These parents consisted of 12 African Americans, 11 Caucasian Americans, 2 Latino Americans, and 2 Native Americans. The average age of their children with DD was 4.6 years (SD=3.6). The types of disabilities experienced by these children included MR (9), autism (3), cerebral palsy (7), and seizure disorders (5). Three children were in the “other” category.

Instruments

The instrument used for this study included two parts: the Parenting Stress Index (PSI) and a general questionnaire. The widely used PSI is a 101-item questionnaire that measures the level of parenting stress (Abidin 1995). The PSI yields three scores: stress from the child domain, stress from the parent domain, and the total stress level (a combination of child and parent domains). The child domain yields the following 6 subscale scores on the stress related to the child's characteristics: distractibility/hyperactivity (i.e., behaviors associated with attention deficit disorders and hyperactivity), adaptability (i.e., ability to adjust to changes in his or her physical or social environment), reinforcement of parent (i.e., experience the child as a source of positive reinforcement), demandingness (i.e., placing many demands upon the parents), mood (i.e., affective dysfunction), and acceptability (i.e., characteristics of the child that do not meet parent's expectations).

The parent domain yields the following 7 subscale scores on the stress related to the parent's functioning: competence (i.e., ability to manage the child), isolation (i.e., isolated feeling from peers, relatives, etc.), attachment (i.e., sense of emotional closeness to the child), health, role restriction (i.e., being controlled by the child's needs), depression, and spousal support.

According to Abidin (1995), the construct and predictive validity of the PSI were supported by numerous studies, such as studies involving individuals with autism, Down's syndrome and MR, studies involving parents of children with behavior problems, and studies involving individuals with disabilities. The PSI has reported its internal consistency and test-retest reliability as being high (0.9 and 0.96,

respectively). The PSI had been translated from English into Chinese by the third author of this study and proven to be an appropriate tool used by Chinese parents (Huang et al. 1998). A standardized translation procedure was followed. The English version of PSI was first translated to Chinese and then the Chinese version of PSI was translated back to English. The final version of the Chinese PSI was validated by another psychologist in China.

Procedures

Participating Asian American parents were recruited from a one-day conference in Northern California. The foci of the conference were to provide the participants with DD related workshops and to administer the survey questionnaire to them. Data were collected during the lunch break of the conference. Participants were informed of the purpose of this study, voluntary nature of participation, and instructions for completing the questionnaires. The administration process lasted approximately 45 min.

The non-Asian American parents were provided with a copy of the questionnaire upon their arrival at the DCFS office and also informed that their participation in this survey was voluntary. Willing participants were requested to complete the questionnaire and return it to the staff.

Data Analysis

Data were analyzed with SPSS version 14.0. One-way ANOVA with Bonferroni post hoc multiple comparisons were conducted to compare parental stress level differences between Asian American parents of children with DD and their non-Asian American counterparts. In addition, Pearson correlation coefficient analyses were conducted to examine the relationship between the age of children with DD and the stress level of their parents, and the relationship between the age of parents of children with DD and the parental stress level in each group.

Findings

Results revealed that the average scores of Asian American parents and non-Asian American parents of children with DD on the total stress level of the PSI were 304 and 276, respectively. According to Abidin (1995), parents with a total PSI score above 260 are experiencing clinically excessive stresses and may require professional assistance. Of the 21 Asian American parents of children with DD, 17 of them (81%) scored higher than 260. Of the 27 non-Asian American parents of children with DD, 17 (63%) scored higher than 260.

Comparison of the Levels of Parental Stress

Table 1 indicates that even though Asian American parents of children with DD reported a higher average total PSI score (i.e., 304) than did their non-Asian counterparts (i.e., 276), the difference between the two groups was not statistically

Table 1 Comparison of the parental stress levels between asian american parents of dd children and the non-Asian American parents of DD children

		Sum of squares	df	Mean square	F
Total parental Stress (TPSI)	Between Groups	9243.50	1	9243.50	2.87
	Within Groups	147954.80	46	3216.40	
	Total	157198.31	47		
Stress in the parent domain	Between Groups	2086.68	1	2086.68	1.62
	Within Groups	59111.97	46	1285.04	
	Total	61198.66	47		
Stress in the child domain	Between Groups	2676.59	1	2676.59	3.82*
	Within Groups	32213.21	46	700.28	
	Total	34889.81	47		
Distractibility	Between Groups	28.19	1	28.19	.94
	Within Groups	1373.47	46	29.85	
	Total	1401.66	47		
Reinforcement	Between Groups	23.04	1	23.04	.72
	Within Groups	1467.61	46	31.90	
	Total	1490.66	47		
Mood	Between Groups	35.36	1	35.36	2.42
	Within Groups	671.61	46	14.60	
	Total	706.97	47		
Acceptability	Between Groups	56.95	1	56.95	2.10
	Within Groups	1244.36	46	27.05	
	Total	1301.31	47		
Adaptability	Between Groups	695.27	1	695.27	16.98**
	Within Groups	1882.64	46	40.92	
	Total	2577.91	47		
Demandingness	Between Groups	101.86	1	101.86	2.06
	Within Groups	2273.61	46	49.42	
	Total	2375.47	47		

* $p \leq 0.05$, ** $p \leq 0.01$

significant ($F=2.87$, $p>0.05$). This finding however may be due to demographic differences between the samples. No significant difference was found between Asian American parents of children with DD and their non-Asian counterparts in the parent domain score ($F=1.62$, $p>0.05$). Nevertheless, there was a significant difference between the two groups in the child domain score ($F=3.82$, $p=0.05$). Asian American parents reported higher stress due to the characteristics and behaviors of their DD children (mean=151.9) than their non-Asian counterparts (136.9).

Statistical analyses were conducted to further examine the 6 subscale scores of the child domain. Results indicated that significant mean difference between parents in the Asian American sample and their non-Asian American counterparts was found on the Adaptation Scale ($F=16.98$, $p=0.00$), indicating that Asian American parents in this sample experienced a higher level of stress stemming from their children's

inability to adjust to environmental changes than did non-Asian American parents of children with DD.

The Relationship of Ages of Children with DD and Level of Parental Stress

Pearson correlation coefficient analyses were conducted to investigate the relationship of ages of children with DD and their parents with the level of stress in both Asian American and non-Asian American parents. For non-Asian Americans, no significant relationship was found between the age of parents (mean=33, SD=6.3) and stress scores in the child domain (mean=136.9, SD=23.6), parent domain (mean=138.8, SD=35) and total PSI (mean=276, SD=54.2). However, the age of the DD children (mean=4.6, SD=3.6) was negatively correlated with the parent domain stress score ($r=-0.41, p<0.05$) and the total PSI score ($r=-0.4, p<0.05$). Non-Asian American parents reported lower levels of parent functioning stress and total parental stress as their children with DD got older.(Tables 2 and 3)

For Asian Americans, no significant relationship was found between the age of the DD children (mean=7, SD=3.8) with the parental stress scores in the child domain (mean=151.9, SD=29.8), parent domain (mean=152.1, SD=36.8) and total PSI (mean=304, SD=59.8). But a significant negative correlation was found between the age of the parents and the parent domain stress score ($r=20.37, p=0.05$). A scatter plot analysis demonstrated that the two variables had a linear relationship. Older Asian American parents tended to report a lower level of parent functioning stress.

Discussion

The current study found that both Asian American and non-Asian American parents of children with DD experienced a high level of parental stress. Of all 48 participants, 34 of them (70.8%) reported clinically excessive stresses based on the PSI. In addition, confirming the results of previous studies (e.g., Baxter et al. 2000; Konstantareas and Homatidis 1989), non-Asian American parents of young children with DD experienced a higher level of parenting stress than those parents who have older children with DD. It was interesting that the stress of Asian American parents was not correlated with the age of their children with DD. One possible explanation

Table 2 Pearson correlation of ages of children with dd and their parents with the level of stress among non-Asian Americans

Variables	1	2	3	4	5
1. Child age		0.27	-0.28	-0.41*	-0.40*
2. Parent age			-0.30	-0.08	-0.18
3. Stress in the child domain				0.66**	0.86**
4. Stress in the parent domain					0.94**
5. Total parental stress					

* $p \leq 0.05$, ** $p \leq 0.01$

Table 3 Pearson correlation of ages of children with dd and their parents with the level of stress among Asian Americans

Variables	1	2	3	4	5
1. Child age		0.41*	0.11	-0.10	-0.01
2. Parent age			-0.14	-0.37*	-0.30
3. Stress in the child domain				0.60**	0.87**
4. Stress in the parent domain					0.91**
5. Total parental stress					

* $p \leq 0.05$, ** $p \leq 0.01$

is that instead of training their children to be independent, Asian American parents tend to be protective and actively involved with the lives of their children due to the culture of collectivism. Consequently, the stress level of Asian American parents does not diminish as their children with DD become older.

Since parents under extreme stresses are at risk of developing dysfunctional parenting behaviors or problematic behaviors in the child involved (Shapiro 1983), this finding suggests that regardless of racial groups, parents of very young children with DD may need professional intervention to reduce these risks. Specifically, social workers may need to arrange various forms of supports for both Asian and non-Asian Americans parents including empathy, respite care, child mental care and information (Douma et al. 2006). Providing respite care services for parents of children with DD (i.e., ASD, Down's Syndrome, CP, epilepsy) has been found to alleviate short-term parental stress and improve their overall family functioning (Abelson 1999; Chan and Sigafos 2001). Research also indicate that the parental stress of having a child with DD was significantly reduced by learning behavioral parenting techniques emphasizing on functional assessment of child behavior and positive behavioral interventions (Feldman and Werner 2002).

Asian American parents in this study reported a higher level of stress due to the characteristics and behaviors of their children with DD than their non-Asian counterparts. Specifically Asian American parents felt stressful because of their children's inability to adapt or adjust to environmental changes. These parents may tend to have difficulties in developing a firm parenting style and be very protective of their children with disability (Abidin 1995).

Even though higher stress level of these Asian American parents may be due to the fact that their children with DD were older and at the stage of entering the regular school environment which tends to be less protective, at least two cultural reasons may also account for this finding. First, many Asian Americans are immigrants and are strongly influenced by Confucian philosophy which states that it is the parent's responsibility for training a child to obey, to exercise self control, and to behave properly in a society. The parenting style of Asian American parents tends to be restrictive, overprotective, or even authoritarian (Kwok and Wong 2000). Many Asian societies still perceive physical (e.g., spanking) and psychological punishment (e.g., "I don't love you if you don't behave well") as normal forms of parenting. Nevertheless, these parenting styles are in conflict with the positiveness and

independence promoted by mainstream U.S. culture. Such conflict may cause intensive frustration and stress in Asian American parents of children with DD.

Second, it is generally recognized that in the Asian American culture, parents value highly the academic achievement of their children (Ho 1986; Rubin et al. 2006; Soong and Soong 1981). A developmental disability constitutes a great obstacle to the fulfillment of family expectations of children in academic achievement. Poor performance of the children is seen as the failure of the parents in the Asian community (Kwok and Wong 2000). Therefore, the parents of a child with DD are susceptible to experiencing a high level of stress.

Another interesting finding of this study was that older Asian American parents tended to report a lower level of parent functioning stress than did their younger counterparts. The significant negative correlation between the age of Asian American parents and their parental stress could also be understood from the cultural context. In the traditional Asian culture, older persons tend to enjoy a higher social status in the family and community via respected roles and productive contributions (Mjelde-Mossey and Walz 2006; Rubin et al. 2006). Therefore, it is possible that older Asian American parents of children with DD are able to establish more resources to buffer the stress they experience in parenting. These resources could include better social support and connection in the community, more knowledge of available services, and greater English speaking ability.

Some implications for service providers have emerged from these findings. It has been proposed that knowledge of the mental health status of ethnic minority families is invaluable in assisting the service system to provide culturally sensitive services to individuals with autism and Down's syndrome as well as their families (Cho et al. 2000). Findings in this study suggest that social workers should be sensitive to both traditional cultural characteristics and the immigrant status of Asian Americans parents of children with DD, particularly for young parents in this population. Various social and cultural challenges could be encountered by parents of children with DD because of their immigrant background. Research has indicated that language barriers, ignorance of available social services, and lack of insurance for needed services all increase their adaptation difficulties (Choi and Wynne 2000; Smith and Ryan 1987). Professional interpreters may be necessary to serve Asian American parents of children with DD. Many Asian Americans do not feel comfortable relying on family members to interpret because family members are unfamiliar with certain terminology (Ngo-Metzger et al. 2003).

It is imperative that social workers provide service information and navigate Asian American parents of children with DD through the social service and health care systems of this country. More aggressive outreach efforts could be done via grassroots agencies in the Asian American community such as schools, churches, and family associations to provide culturally sensitive information and services to Asian American parents of children with DD. Information of events and services could be promoted in local Asian American mass media. Social workers also should strengthen both formal and informal social supports of these Asian American parents. Support groups for Asian American parents can be utilized. A sense of community may provide Asian American parents of children with DD with a safe environment to share their struggles and obtain mutual support (Huang et al. 2005).

Additionally, social workers may consider arranging stress management and parenting training for Asian American parents of children with DD. Stress management strategies should include both cognitive and behavioral approaches that may facilitate their coping with the extreme pressure resulting from child rearing difficulties. Parents should also be helped to understand “how cultural values and practices may contribute to the parenting stress they are experiencing. They should also be informed of the possible unrealistic cultural demands on themselves and on their children” (Kwok and Wong 2000, p. 63). Some Asian American parents may benefit from assertiveness training so that they can develop a warm but firm parenting style (Huang et al. 2004). Specifically they should be instructed appropriate skills of communication with their children and reinforcing positive behaviors.

Limitations

Results of this study should be interpreted carefully due to the small sample size and the non-probability sampling procedure. Nevertheless, the findings may still yield some preliminary empirical data on the comparison of stress experienced by Asian American and non-Asian American parents of children with DD. Another limitation is the method of comparing parents in the Asian American sample with parents in the non-Asian American sample. Since these two groups of parents were not matched in non-cultural aspects, some non-cultural factors possibly affecting the findings of this study were not controlled. Specifically some possible variables that limit generalization of this study include the caregiver and child’s average age, the array of developmental disability diagnoses, the number of father respondents, the number of discarded questionnaires, and obtaining the sample from the geographic regions of California and Georgia. In addition, the SES of the non-Asian sample was likely to be lower than the Asian-American sample. Therefore, the current findings about between-group differences in parental stress that may be due to ethnicity and cultural background should be considered as being suggestive rather than conclusive.

Future research should exercise more careful control of the non-cultural variables between Asian parents and non-Asian parents of children with DD. For example, perhaps specific Asian and non-Asian groups (e.g., Chinese vs. African Americans or Chinese vs. Caucasian Americans) should be compared. Another issue that needs to be considered is the possible within-group differences in each group. For example, even though children were categorized into different types of disabilities, the characteristics of child behavior in each category could be different. Some children of autism may display much more challenging behaviors than other children of autism which may directly affect the level of parental stress of the sample. Characteristics of parenting style and availability of supportive resources among Asian American parents and how these two factors may relate to the parental stress of children with DD should also be further examined. Finally, low English language proficiency might be one contributing factor to the parental stress level in Asian American parents. In the present study, five Chinese American parents with little English competency used the Chinese version of the PSI while another five bilingual

Chinese American parents chose to use the English version of the PSI. More research is needed to determine if English competency is indeed a significant predictor of the parental stress level in Chinese and other Asian American parents of children with DD.

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