

**Asian American Immigrant Parents Supporting Children with Autism:
Perceptions of Fathers and Mothers**

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Abstract

Asian American immigrant parents supporting children with autism spectrum disorders (ASD) has been understudied. The purpose of this qualitative study was to probe the perceptions of Mandarin-speaking immigrant mothers and fathers raising children with ASD in the United States. Ten participating parents were first-generation native Mandarin-speaking immigrants born in Taiwan, Hong Kong or Mainland China. Open-ended interviews were conducted to collect data. The interviews were transcribed and translated verbatim and analyzed using content analysis. Four main themes by gender comparison were derived from the self-report data: cognitive responses of ASD diagnosis, perceived role, coping strategies and future expectations. Implications for diversity awareness in professional practice and supports to meet the needs of Mothers and Fathers in promoting inclusion were discussed.

Keywords: Immigrants, families, autism, mother, father

Introduction

According to the U.S. Census Bureau (2012a: 2012b), 57 million or 20% of people spoke more than just English and 38 million or 12.5% people who resided in the United States were foreign-born. Nearly seven million U.S. residents or 17% of these foreign-born people arrived after 2005 (Walters & Trevelyan, 2011). This implies that a significant number of U.S. children had families were recent immigrants or spoke primarily or exclusively a language other than English. However, very little is known about immigrant and refugee children in their new country of residence, especially if they had a disability. Research suggests that immigrant status may be a risk factor for autism spectrum disorders (ASD). Specifically, several researchers found increased risk for having a child diagnosed with ASD when at least one parent was an immigrant (Barnevik-Olsson, Gillberg, & Fernell, 2008; Keen, Reid, & Arnone, 2010; Magnussen & Saemundsen, 2001).

In addition to the stress of raising a child diagnosed with a disability, it is not uncommon that immigrant families confront culture-related stress or adaptation issues. Additional issues for immigrant children and their families are likely to exist, including language barriers, cultural differences and the lack of reliable and validated measures in the family's primary language. Immigrants referred to health care services may have more limited knowledge about navigating health care systems, further complicating their ability to access appropriate services (Welterlin & LaRue, 2007). While recent immigrant families are on average more likely to live in poverty and to have less educated parents than non-immigrant families, children under the age of six in immigrant families have been reported to use public benefits less often than those of U.S. born parents (Javier, Huffman, Mendoza, & Wise, 2010). The parents' socioeconomic status, language, education, and ethnicity have all been shown to be important factors in how immigrant families with children with special health care needs experienced health care (Javier et al., 2010).

Although a substantial amount of research has paid attention to important issues in the early experiences (e.g., diagnosis, services, coping, adaptation) of families who have children with developmental disabilities, these have been predominantly from European American families perspectives (Zhang & Bennett, 2003; Zions, Zions, Harrison, & Bellinger, 2003). Cultural linguistic diversity and ethnicity issues have been striving for attention in research. A recent report found not only later diagnosis of ASD for Hispanic American and African American children than Caucasian children, but also significantly later diagnosis for children of mothers born outside the continental United States (Valicenti-McDermott, Shulman, Hottinger, Burrows, Bernstein, & Seijo, 2010). These findings suggest that delay in diagnosis may be more substantial in recent immigrant children or those whose parents have lower English-language

proficiency regardless of ethnicity. Children with ASD of minority race and ethnicity, compared with Caucasian children, have been reported to receive limited services and appear to receive these services at a later age (Levy, Mandell, Merher, Ittenback, & Pinto-Martin, 2003; Mandell, Listerud, Levy, & Pinto-Martin, 2002). Most ethnic minority families experience low levels of parent education and are living in nonmetropolitan areas (Thomas, Ellis, McLaurin, Daniels, & Morrissey, 2007).

Gender Differences: Perceptions of Mothers and Fathers

Several Western studies have examined gender differences between mothers and fathers who have a child diagnosed with ASD. In recent decades investigators have moved into the arena of family systems, examining the needs expressed by both mothers and fathers of children with disabilities (Lamb & Laumann-Billings, 2003). Although there is more research from the mothers' point of view, several studies focus on how fathers and mothers of children with disabilities differ or are similar in functions across several dimensions. The findings are mixed. Some research conducted in the United Kingdom suggests that mothers and fathers who have a child with ASD do not differ in their levels of stress and depression (Hastings, 2003; Hastings, Kovshoff, Ward, Espinosa, Brown, & Remington, 2005), which was also reported in parents of children diagnosed with Down syndrome and typically developing children in Poland (Dabrowska & Pisula, 2010). However, in other United States and European studies, mothers score higher than fathers in parental stress (Dabrowska & Pisula, 2010; Little, 2002; Tehee, Honan, & Hevey, 2009) and depression symptoms (Davis & Carter, 2008; Hastings et al., 2005).

Previous studies indicated that maternal stress was associated with the child's level of social skills, child problem behaviors or level of impairment, assumed higher caregiving responsibility, and fathers' mental health (Baker-Ericzen, Brookman-Fraze, & Stahmer, 2005; Davis & Carter, 2008; Gray, 2003; Hastings, 2003; Tehee et al., 2009), and negatively related to relationship satisfaction, spousal/social support, and commitment (Brobst, Clopton, & Hendrick, 2009). For fathers, parental stress was associated with their child's externalizing behaviors (activity/impulsivity, aggression/defiance, and peer aggression) and was negatively related to social support (Brobst, et al., 2009). Hastings et al. (2005) found that fathers' positive perception and paternal depression could be predicted by the mothers' depression, but not vice versa.

Studies have also identified that fathers of children with ASD tend to express anger, whereas mothers may experience sadness, crying and seek support or consultation from their family, friends, peer parents, and professionals (Gray, 2003; Little, 2002). In comparison to fathers, mothers are reported as being more involved, displayed higher levels of coping related to caregiving (Tehee et al., 2009), used more communication (Little, 2002), and tended to adopt

active avoidance coping and problem-focused coping (Hastings et al., 2005). In addition, mothers reported more positive experiences than did fathers (Hastings et al., 2005; Kayfitz, Gragg, & Orr, 2010). Mothers also reported more sensitivity and awareness of their child, greater acceptance of things in life, stronger attachment among family members, greater beliefs in the purpose of all people, and a larger support network of friends than did fathers (Kayfitz et al., 2010). Further, research has identified mothers of children diagnosed with high-functioning ASD to exhibit more adaptive coping skills as compared to fathers (Lee, 2009).

Perceptions of Mothers and Fathers who were Immigrants

Bishop, Richler, Cain, Lord, and Floyd (2007) reported that African American mothers perceived less negative impact than Caucasian American mothers while raising a child with ASD. The significant predictor of higher negative impact among African American mothers was the perception of less social support. Some researchers suggest that minority groups such as Hispanic Americans, Asian Americans, and African Americans function similarly in social networks and social support systems of Caucasian Americans (e.g., Kim & Mckenry, 1998).

While existing studies have documented differences in perspectives among African American and Hispanic and Latino American families of children who with a disability, study findings on the perspectives of Asian Americans were sparse. Chinese American families expressed mostly concerns regarding social stigma (Parette, Chuang, & Huer, 2004) and 'losing face' ('face' means respectability and /or deference) (Ho, 1976). Asian American parents tended to attribute the cause of a child's disability to supernatural influences or sins committed by the child's parents or ancestors (Chan, 1998). However, Parette et al. (2004) concluded that those who were first-generation Chinese American parents, educated in the United States with higher levels of education and longer life spans, saw disability positively. They accepted the child's disability with a hopeful attitude, because of the rich resources and legal protections of the special education system in the United States.

There has been a rapid population increase of children with ASD, as well as immigrants and cultural linguistic diverse families. Yet, little is known about the experiences of Asian immigrant mothers and fathers who had a child diagnosed with ASD. Emancipating the Asian American voice, we focused on the Mandarin-speaking sub-population, from a gender perspective. The purpose of this qualitative study was to compare the experiences of Mandarin-speaking immigrant fathers and mothers raising a child with ASD, so that this data could be used to develop and attract further culturally sensitive and gender inclusion models for supporting parents as partners in special education and related fields. The specific research question asked

was, “what were the experiences of raising a child with ASD from the perceptions of fathers and mothers respectively?”

Method

A descriptive qualitative study was performed to describe Mandarin speaking immigrant Asian-American mothers and fathers experiences of raising a child diagnosed with ASD. Open-ended questions were used in order to encourage eliciting richness of parents’ experiences in a natural conversational manner (Merriam, 1998). Content analysis (Coffey & Atkinson, 1996) in terms of gender comparison on the self-reported data was conducted to probe the similarities and differences between mothers and fathers.

Participants

A convenience sample of six native Mandarin-speaking immigrant Asian American families, including four dual-parent families and two single mothers, living in a city located in the northern United States were invited to participate in the study. We recruited, by word of mouth, the Mandarin speaking people, professionals and families who had a child with ASD and who may know potential eligible participants. We also used public advertisements with flyers in centers, clinics and organizations, and with parent groups providing services for children with ASD. Mothers and fathers were first-generation immigrants born in Taiwan, Hong Kong or Mainland China, raising a child diagnosed with ASD. Their years of residency in the US ranged from 10 to 20 years. Ages of children with ASD ranged from three to eleven years old, and their age at initial diagnosis from 1.5 to 2.5 years old. Mothers’ education levels ranged from high school to PhD, and fathers’ education level ranged from Bachelor to PhD. Participants' children were diagnosed either from a licensed physician or a multidisciplinary team in clinic or hospital. Only one of the children with ASD was verbal.

Data Collection

This study was approved by the appropriate institutional review board and informed consents were obtained. Participants were assured that they could withdraw anytime during the study and could refuse to answer any posed questions. Each participant was interviewed separately in the language he or she selected and at the time and place of their choice. Most participants chose to be interviewed in Mandarin at their homes by the first author. One pair of parents chose to be interviewed in English and were interviewed by a native English speaker; one

mother chose to be interviewed at a coffee shop near work.

Demographic data were collected before the interviews. Based on a review of literature on culture and disability, interview questions were designed in lay language and proceeded with grand tour questions (Leech, 2002) such as:

- Could you take us back to when you sensed something was different with your child?
- How did you and your family members feel?
- How did this impact your family and life?
- Where and who did you receive support from?
- What role did you see yourself in your child's development?
- Why did you move to the US?
- Was the experience different from what you thought?
- How would you envision yourself and your family 10 years from now?
- What language did you speak to others and to your family members?

In addition, some prompting and other techniques (such as paraphrasing, eliciting examples, and active listening by nodding head or asking questions) were used to enrich responses and clarify and confirm parents' meanings. Rapport building with participants, avoiding subjective comments, and duplicated questions were embedded to ensure trustworthiness of data. The interviews ended with an invitation for parents to share the coping strategies they used, how they shared with other families, and an opportunity to raise any other unaddressed topics that participants would like to narrate. The interviews were audio-recorded and later transcribed for analysis. Each interview was approximately one hour in length.

Data Analysis

Audio-recordings conducted in Mandarin were transcribed verbatim into Mandarin and then translated into English by the first author. To analyze differences of experiences narrated by fathers and mothers by gender, transcripts were read and analyzed using constant comparative method (Lincoln & Guba, 1985). In this method no predetermined categories of analysis were used, but instead themes and sub-themes were identified in the data to guide the coding and facilitate detailed understanding of the context (Maxwell, 2005). This process continued until no new information emerged. Authors checked the codes with each other to establish inter-coder agreement. A narrative summary of each parent and a comparison chart of all parents were used to search for differences, similarities and patterns. Disconfirming evidence and collaborative work were made to establish data quality (Brantlinger, Jimenez, Klingner, Pugach, & Richardson,

2005). Data quality checks for researcher bias and coding checks were made collaboratively by the two researchers to achieve consensus and confirmability.

Results

Based on the interview guidelines, four main themes were derived from the data: cognitive responses of ASD diagnosis, perceived role, coping strategies, and future expectations. The meanings within each of these main themes and the sub-themes were described in detail below.

Theme 1: Cognitive Responses of ASD Diagnosis

Parents' confronting their child's ASD diagnosis in their earlier life stage, and parents' cognitive responses to the diagnosis were identified and categorized into the following sub-themes: etiology of ASD, description of symptoms, and reactions to diagnosis.

Etiology of ASD.

Mothers. Several items were mentioned by mothers regarding the cause of ASD, specifically cited were the microwave, suffering a fall where "Chi" would be leaked, a violation of a pregnancy taboo, environment factors activating ASD, and life style. Pregnancy taboos tied heavily with cultural rituals and beliefs. Some Chinese and Taiwanese mothers believed by not violating the taboo, they would positively position their mood and mind set and thus it would safeguard the health and intelligence of the baby (Chou, 2002; Lee, Ngai, Ng, Lok, Yip, & Chung, 2009). One mother [Mother E] reflected, "Another factor might be the milk he had, I steamed milk by using a hot pot for the eldest child, but I used microwave for a period of time for the second child (with autism), this factor could not be ruled out.... In Taiwan, we used hard brick for the floor instead of carpet..... He fell down with a big sound hitting his head... Doctor said his anterior skull was not close[d] yet, suffering a fall would leak the Chi (a traditional Chinese medicine theory)." Another mother [Mother J] reported her belief that she violated a taboo as causing ASD, specifically, "Someone said maybe I did not comply with the taboo like no driving a nail, no construction work during pregnancy."

Fathers. Fathers more globally speculated on a host of things that caused ASD: diet, genetic factors, external environment (chemicals, genetically-modified foods), vaccine injections, and modern technology including radio, radiation, computer, microwave and wireless devices which cause some people to be vulnerable. One father [Father Y] felt strongly that his child's diet was

to blame, stating “The first thing I think it was the diet. We fed him so many meals and one day I found there was an online document on the website about a mom talking about the diet on her kid and got maybe 90% cured or something...I think it was one contribution for his bad temper or loosing regulation or something.” Further, another father [Father E] identified environmental aspects as a cause, citing “...external environment influences human body slowly and gradually, maybe a generation. For example, we use chemicals much more than ancestors, from zero increase to a situation that everything is chemical.”

Description of symptoms.

Mothers. Mothers reported being aware that something was different in their child’s development and were able to describe in detail these delays based upon their own observations. One mother [Mother H] reflected, “Children at that age should know how to say ‘daddy’, ‘no’, ‘yes’, and other easy baby words. He couldn’t say them. I suspected something was wrong...The toys do not fit into the big truck because there are small trucks inside but he still tried hard to put them in. Yes, this behavior was a little bit abnormal.” Another mother [Mother J] reflected upon a similar concern, noting, “I had been waiting for diagnosis confirmation for few years. That was the most suffering stage. She could speak when the diagnosis was confirmed. I had observed her change, although she could speak, her behavior and other developments were deviant.”

Fathers. In contrast to mothers, fathers compared their son or daughter with other peers. Fathers noticed atypical behavior as they compared their son or daughter to a child that was believed to be typically developing. One father [Father E] reported the difference seen between his children: “He was not talking much, not keeping eye contact, tended to not be able to communicate. His sister was a big difference, she was more aggressive, she was more A-type, so basically by nine month she was watching TV and playing toys. She started talking approximately by one year old. Two examples to see why Eric (pseudonym) was behind, may be a boy, but he was not normal, because he was not laughing, smiling. He did not communicate, not talking as much as his sister.” Another father [Father Y] compared his son to peers: “His interests were awkward, very different from peers. He really liked to look at a piece of wood, or grab a log on the street, if you threw it away, he cried like crazy.”

Reaction to diagnosis.

Mothers. Mothers and fathers reported similar feelings of shock and difficulty in accepting the ASD diagnosis. However, the mothers described more engagement in help-seeking behaviors

(i.e., seeking out information, resources and consultants). For example, Mothers stated such things as: “I sought for resources by myself [Mother W],” and “...you asked around...You asked parents and you usually got the information you needed...I went to conferences [Mother G].” Most mothers expressed how isolating the diagnosis was and how helpless if the family members, such as the father, were not accepting of the diagnosis and tended to burst into tears when describing this situation. One mother [Mother E] reported, “He (husband) denied the fact that his son was a child with autism by saying: “You see, he can learn and be sociable.” He became angry if I mentioned autism. We did not tell my parents-in-law until recent one year, because of my husband’s denial.” Another mother [Mother J] talked about the difficulty: “He (Husband) had no concept at all, did not believe me. He did not identify my hardship. Like others, he had been thinking of the delayed speech. I had been anxious and took her to see doctors...only myself, so my mood was blue.” One mother [Mother E] articulated what most mothers reported: “I always feel solitary and helpless, because the family support was absent during the whole (diagnostic) process.”

Fathers. Fathers' reported resistance to the diagnosis which appeared to last longer when compared to mothers. For example, a father [Father Y] reported, “Even now my wife and I talk at night, I still think ‘what if our son were normal?’” Some fathers said they felt angry when their spouse brought this issue up [Father E & H]. As reflected above, most fathers tended to keep the results of the diagnosis hidden; to make it appear that the disability was hardly on their mind. As one father [Father Y] said, “I have family members have had leukemia, cancer, but autism is something new. Basically it’s a shock. Second, I did not know what to do. Yes, basically shock and not knowing what to do, because I have grown up in an environment basically everything is perfect...I think Chinese tend to save face. They don’t like to address things that let people knowing you have problem.”

Theme 2: Perceived Role

Perceived role.

Mothers. Mothers used more child-centered language to describe their role and frequently referred to the child’s goals, and seldom mentioned their own goals. Mothers reported that their lives became focused on their son or daughter with ASD. For example, one mother [Mother Y] reflected, “After diagnosis, I have been very involved, [and] purposely play with him. I sacrifice so many things. Maybe other people cannot imagine. I myself am a very serious person. I put aside my career and focus on him. I know his critical time is only the first few years. The only

thing I can do is to put aside my career. I know I will go crazy if I keep doing this. I am not a stay home mom. I keep my current job at the same time but I know I am all for him. I know I have to put aside my ambition.” Other mothers reflected a similar decision, such as “For the sake of child, many mothers would like to stay home...so I decided to stay home in order to take care of them [Mother E]” and “(My role is) support her and being a guide...nutrition, nurture...those important things that parents can give to the child is the unconditional love” [Mother H].

Fathers. Fathers had more self-description and expectation of self as a role model for their son, such as “I want to be their model [Father E]” “Before he was born, we knew we would have a boy, oh, that’s great, I was going to show him astronomy, physics, not to make him into a geek or something but...you know...I love natural science and geographic science...Remember when I was a kid, I love to learn so many things from my father, so I thought I could teach my son so many things [Father Y].” However, most fathers described a view of themselves as being failed role models for their children. “His mother is nice, and I care more about discipline [Father Y]” “My wife is the best person, because I am the more impatient guy [Father E]” “I am not a good role model. I am bad-tempered. It is hard to control my temper.... To tell you the truth, now I am occupied by labor and toil more than enjoy the family love and joy. I do not have enough chance, time and mood to enjoy life. The impacts to our career are tremendous, we feel difficult to make decision to move [Father H],” said three fathers. Some fathers expressed concerns around their own education, the environment that they could provide for the children/family, and the ability to allow their child to fulfill his/her dream. Some examples were as followed. ”I am not saying that all the rich people have a higher education but in proportional wise, look at those who become CEO or something, they all have higher education, Master, PhD. I am sure education is a very important aspect [Father Y].” “It’s all about the parents driving the kids to grow up...You want to make the kids grow up quickly and independently. You have to help with that, not just the environment [Father E]” “It will be hard for them to go back and grow up in Hong Kong. Maybe Taiwan they can, but not Hong Kong that’s just the pace too fast for them... I am mostly for the kids. I would like kids to grow up in an environment where the resources and things are available for him to develop [Father G]. ”“...You learn what you want. It’s up to you, do what you want to do it’s on your choice. I cannot tell the kids to do this one or the other thing... As long as he gets and accesses the same support that he needs, he will develop” [Father H].

Theme 3: Coping Strategies

The results revealed small differences of appraisal-focused and problem-focused coping strategies adopted by mothers and fathers. It was somewhat inspiring to find that both mothers

and fathers read papers and attended conferences to gather more related knowledge and information as one of their coping strategies. On the other hand, participant mothers tended to employ emotion-focused coping and religious coping, whereas fathers tended to use rationality-focused coping strategy, e.g., searching for related knowledge and go on a journey of hope.

Coping strategies.

Mothers. Mothers vividly expressed their emotions and low moods, such as “You cry, you're sad but continue moving [Mother G].” Helpful coping strategies cited by the mothers included: sharing the experience with others, information seeking and religion which they identified to be related to spiritual healing. One mother [Mother E] discussed her focus on religion, saying “There was a positive voice to tell you that everything is OK, do not worry too much. Sometimes I took him to worship at a temple, drew lots to pray for peace. I was advised to take him for therapy; the outcomes were not so negative. ... Right, in the past two years, my soul to God, my child was fine.” Another mother [Mother J] shared her coping strategy of seeking out a variety of resources: “I had read many autism related papers, lots of information, and attended conferences. In addition, I attended parent group in which parents organizing meetings, reviewing government new program to assist child, inviting expert to give a speech, and sharing experiences. It is helpful more or less. Parents get together, they understand mutual mood, help each other, and pass along messages to each other. Their stories are my story too.”

Fathers. Fathers usually adopted rationality-focused strategy and rarely revealed their psychological emotional change or feelings. As one father [Father G] said about his experience, “Coping is to read and understand more about symptom and knowing more about it, and talking to different parents then you understand how to face it rather than as before we don't know what it is, I don't know how to deal with.” Another father [Father H] described, “Recognizing he is different, we will not compare him with others, but the action is difficult. You understand well that he is different from others, so you compare him with others expectedly or unconsciously. You awarded him time during the first year; you still awarded him time during the second year but lower your expectation, he just could not do it in some aspects.”

Theme 4: Future Expectations

Mothers and Fathers shared similar future expectations about their child with ASD. Both parents reported independence as being important for their children's future life.

Mothers. Mothers lowered their expectations for their son or daughter when they were diagnosed with ASD. Hopes for their children centered on the ability to attend school, be independent, and develop self-management skills. For example, one mother [Mother H] said, “I hope that he can be independent in this society in the future, have a job to support him, survive without financial concerns, understand and obey social order, able to make friends, and preferably have social relationship. Unless medical development is enhanced to a level of cure, he will be dependent on me a lot. Therefore, we are thinking about making will for his future liberalism.” Another mother [Mother Y] mentioned in addition to independence, her concern of her child’s happy life, saying “First is happy and second is independent. I very hope he can be happy and he can take care of himself. It doesn’t matter what kind of job. Of course, me and my husband are well-educated, we used to dream a lot for him. But now especially this year, my demands are more realistic. I think if he can independently push carts or help people in SAFEWAY (a super market) or Ginger Thai (a restaurant), I don’t care, as long as he can be happy.” Another mother [Mother J] reflected similar future expectation: “I am thinking more of you know the future part of when he gets out of school. Will he get a job and get the support he needed? And will he have fun in his life and do the things he likes to do? The short-term goals will be, you know, get the education he needed.” Further, another mother [Mother E] shared the reality as learning experience: “I do not know if he can reach...for example, in academics, I really don’t know if he can catch up, so my expectation has changed from the original. Now my realistic expectation becomes that he can support himself in the future. I am a realistic person, I observe his learning and social ability to judge what he will be.”

Fathers. Fathers lowered their expectations as well, but still held higher expectations than mothers. One father [Father G] simply stated, “My goal is higher...I want him to take care of me.” As another father [Father E] reported, “I still set my expectation of him working when he grows up. Maybe he is not going to be like a normal kid, but he will probably do things like normal kids would do.” Another father [Father Y] expressed that he never gave up hope, saying “When the OT showed him climbing on the ramp, he was clapping his hands; he wanted interaction. So like I told you, he is not the worst scenario, so I think there is a hope...my son, he is going to be an engineer. I still want to train him to be an engineer.”

Discussion and Implications

This study presents a novel contribution to the gender perceptions in the experiences of

immigrant parents, and compares the impact of having a child with ASD and coping strategies between fathers and mothers. These findings are partially congruent with others in the literature on children with ASD (e.g., Gray, 2003; Hastings et al., 2005; Little, 2002; Tehee et al., 2009). In addition, this research elicited from the data new insights that immigrant fathers and mothers hold and their unique perspectives in living in a different culture and raising a child with ASD.

Inclusion is not a privilege focusing only on children with disabilities. In fact, inclusion is equally shared by everyone, including typically developing persons, service providers and parents regardless of ethnicity, age, gender, education and culture, to foster a sense of belonging (Allen & Schwartz, 2001). Supporting and meeting the needs of fathers and mothers of children with ASD would lead to better quality of lives and enhance inclusion. The differences fathers and mothers experiences in this study lead us to further thoughts on the sustainability of family support. Specifically, this study suggests that when practitioners supported immigrant children with ASD and their families, they need to take into account the culture and nature of gender differences in cognitive responses of ASD diagnosis, perceived role, coping strategies and future expectations. The following describes implications from this study for mothers and fathers as gender differences emerged.

Implications of Gender Differences in Cognitive Responses of ASD Diagnosis

Cognitive responses of ASD diagnosis referred to the point in time that mothers and/or fathers first noticed something was different about their son or daughter. Compared to fathers, we found that the mothers tended to detect atypical signs earlier and in more detail. Mothers responded to an ASD diagnosis with more acceptance than fathers. Mothers quickly engaged in problem-focused coping strategies, including finding resources and treatment, making sacrifices and devoting care-giving activities. Mothers also engaged in communication with service providers about education and therapies. In contrast, fathers' reports of the early experiences of ASD aligned with seeing the child's behavior as being a delay in development rather than a medical diagnosis. Some fathers in our study reported feelings of anger which is congruent with the work of Gray (2003). However, they also report feelings of denial and disappointment upon receiving an ASD diagnosis. Based on the data, mothers paid more attention to the child's development phases to discover the child's symptoms. Yet, fathers detected ASD by comparing with other typical siblings or peers and responded to the diagnosis in a variety of ways, as some refused to accept it and others hid it from relatives. Regarding social expectations, males were often encouraged to be independent, while females were expected to comply, which may influence each gender's preferred choice of coping strategies (Pisula & Kossakowska, 2010). Practitioners can provide typical development milestones or pinpoint the differences using

comparison strategies as a reference to assist the fathers' acceptance of their child's diagnosis.

Then mothers and fathers could be working partners with health providers or special educators, leading to a child's positive treatment outcome and possible social function improvement.

Implications of Perceived Parental Roles

In general, our findings aligned with the research by Gray (2003) which indicated that mothers were more likely to experience the negative impact of their child's disability on their daily lives in terms of emotional distress, taking the primary role in the medical referral process and dealing with their child's educational problems than fathers. Most mothers sought out social support from families, friends and other parents who had similar experiences. Practitioners could assist mothers to participate in social support/parent support groups and acknowledge their familial effort in supporting the child with ASD. Similar to the findings of Tunali and Power (2002), mothers placed less emphasis on career success and were more likely to believe that mothers of young children should not work outside of the home. Although the participants disclosed feelings of being trapped in the parenting role, mothers were more stressed and depressed yet found it easier to accept the diagnosis, had larger social networking groups and also more positive thinking on child improvement and confidence of treatment which echoed the findings of Hastings et al. (2005) as well as Kayfitz et al. (2010). Also aligned with Gray (2003), fathers in this study expressed challenges of controlling anger which made them conclude that they are not as good a role model as they would like. Practitioners could acknowledge and assist fathers to identify other aspects of being a good model, such as achievement at work and offering education and financial support to the child and family.

Implications of Different Coping Strategies of Mothers and Fathers

Mothers were more stressed, but had some coping strategies, e.g., actively searching for information, resources, consultant and respite care. Some mothers adopted a religious strategy that may also have a particular role in the adaptation of families of children with ASD (Hastings et al., 2005). The mothers tended to rely on emotion-oriented coping strategies, especially religion should be emphasized as these were also critical coping strategies the mothers often used. Spousal support and parent education provided by the practitioners should not devalue or challenge the mothers' belief or mental support seeking behavior. Fathers usually adopt rationality-focused strategies and rarely reveal their psychological emotional change or feelings. Though fathers might not have expressed much emotion in the interviews, they stated that talking

to other parents was a way to help them cope.

Implications of Future Expectations of Mothers and Fathers

Mostly mothers described taking main responsibility for children's care, education and treatment. Fathers reported being less often responsible for these aspects. Therefore, mothers were more involved in supports and seeking resources and recognized the importance of family support, especially the support from husbands. When asked about future expectations, mothers emphasized children's needs whereas fathers were more concerned about what fathers can offer to their children. Regarding the child's future, mothers generally accepted the ASD diagnosis earlier and set the child's future life goal of being independent and happy. Fathers usually expressed a slim hope, and had higher expectations for, the child's future employment and education level. These findings are congruent with a study of Rodrigue, Morgan, and Geffken (1992).

A large part of the gender difference in experiences supporting a child with ASD could be explained by social roles and their social constructions. Like in the Han's society, these Mandarin speaking immigrant Asian-American mothers and fathers strongly followed the notions of Chinese tradition. Well go the traditional sayings, "man are breadwinners; women are home makers" as well as "male superiority." Therefore, mothers perceived their caregiving role to stay home and take care of their child, but none of the fathers revealed the need to make decisions between work and home. However, fathers perceived themselves as resource providers, through such avenues as education and finance.

Gender differences were also generally found in emotion disparities. In this study, mothers reported more stress and the need of emotional support seeking, such as from other families sharing the same experience, extended family and religion. Some of the mothers believed that they had violated the pregnancy taboos to cause the child's ASD. Given this viewpoint, mothers may experience feelings of guilt. However, fathers expressed a more positive attitude towards the future expectations for the child and held more denial reaction with the cognition of ASD diagnosis. This primarily may be due to avoiding losing face, the concept from Chinese culture (Ho, 1976).

Implication for Practice and/or Policy

These culture impacts should not be ignored by those service providers who seek to support the family for better quality of lives and for inclusion. Moreover, the experiences of mothers and fathers must be accounted for to meet the needs of all. Failure to do this may marginalize one

parent and place him or her in a situation where their voice was not heard or needs were not met. In addition, service providers must seek to understand the culture that the family came from and provide services that are responsive to this culture and how it is manifested in the family. For example, couple support groups could be an important source of instrumental, informational and emotional support for parents to meet their unique needs during various transition periods for the child (Meadan, Halle, & Ebata, 2010). In addition, parent education and training programs acknowledging culture and gender differences are also vehicles that may contribute to feelings of control and support (Meadan et al., 2010) and lead to empowerment and psycho-social well-being.

Implications for Future Research

As a qualitative study with a small sample, only four of whom were fathers, the generalization of this gender comparison results may be limited. In this study, a general challenge of recruiting participants with Mandarin speaking American immigrant fathers and mothers existed. The recruitment was not successful until the referral of an Asian American parent group board member, a Mandarin-speaking native. This may be echoing the loosing face social stigma issue and that one father [Father E] stated clearly before the interview ended, “ One of the things getting enough participants in your study...it is all about how it going to benefit me or how it will save my face. Chinese are hard to be very open about everything...Literatures are not customized...because the people designed them were Caucasians. They were going to design the way they felt like, how they perceived it.” Limitations notwithstanding, our results could be a starting point for further research in minority and immigrant population. With necessary recruitment strategies, it would be meaningful to conduct a quantitative study with a larger sample size to develop related measurement scales (e.g., perceived role scale, coping strategy scale, level of assimilation/acclturation) or to compare the cognitive responses of ASD diagnosis, perceived role, coping strategies or future expectations and analyze the mediators of gender differences between different ethnic groups. In addition, targeted types of strategies or interventions to facilitate positive outcomes could be developed and scientifically evaluated.

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