DEVELOPMENTAL AND RISK STATUS OF TODDLERS FROM ARAB AMERICAN FAMILIES: WHAT WE KNOW ABOUT FAMILIES TODAY

by

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DISSERTATION ABSTRACT

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Title: Developmental and Risk Status of Toddlers from Arab American Families:

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Arabic speaking families comprise a fast-growing community in the United States (US), and little research has been done to study the developmental outcomes of these toddlers and families. This study investigates the overall developmental and risk status of 191 toddlers from Arab American families, 18 – 36 months of age. Parents completed an online survey containing an overall screening of development, the Ages and Stages Questionnaire (ASQ3:AR), the Parental Stress Inventory: Short Form - Arabic (PSI:SF - AR) and a demographic form. Descriptive statistics indicated that 66% of the toddlers showed typical developmental based on the ASQ3-AR scores. Analyses of variance investigating relationships between environmental factors of toddlers' development and parental stress suggested no significant relation. However, a correlational analysis comparing child development and parental stress was significant.

In addition to completing the online survey, 17 participants were interviewed to gather more in-depth information about family risk and resilience. Content-driven thematic analysis of parents' responses revealed challenges in raising their children in the

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US including cultural differences, religion and language related challenges. Some of the techniques that parents used to overcome their challenges were building a community, practicing Arabic and teaching their children about religion and culture. Parents shared they felt they had fair access to services for their children. Based on the findings of this study, educational, community, and research implications are discussed.

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CHAPTER I

INTRODUCTION

Terms such as "the West/Western countries" are used among Arabic speakers as fluid terms to describe European countries and the Americas. I have been living as an international student in the West for the past eight years during which time I obtained a diploma and advanced degrees. Living away from family and friends has meant living outside of my comfort zone, but it also placed me in a discovery zone. I have been growing on a myriad of levels. One of the most important qualities I am developing is acknowledging my own identity; becoming aware of my own biases, as well as my own privileges. I learned through living experience what it means to identify as a Muslim woman, of a mixed heritage, from Saudi Arabia.

Based on these personal identifications, I have been perceived with a broad spectrum of responses by the people surrounding me--from considered a relatable source of support by some, to being considered as an intimidation or a threat to others. The level of familiarity that people feel towards me is dependent on the many personal identifications that are shared between us. For example, within the Arab American community (AAC), I have been considered relatable by recently immigrating individuals who find my journey similar to theirs, as we are settling in the US, exploring and understanding its culture. Those who immigrated long ago generally expressed their approval of my journey and their feeling of pride at my educational achievements.

Beyond the AAC, individuals from a non-Arab background create their understanding of my personal identifications through meeting people from similar backgrounds to mine, and through media. As the vast majority would not be able to tell whether I am a domestic citizen or an international visitor, they will treat me

indifferently. Some individuals will mostly recognize the hardship I face as an English second language (ESL) graduate student, while others will show compassion because they view me as a survivor from a culture that I personally have never considered abusive. Often times driven by stereotypes and the lack of commonalities between us, a few incidents have happened in which I faced some sort of rejection from society. In these rare incidents, rejections were translated into acts of discrimination. Multiple encounters have occurred, including being shouted at in public, having fruit thrown at me and a close-distance encounter with someone throwing slurs and insensitive insulting remarks asking me to leave the country.

Although being comforted by many friends that the latter incidence is unlikely to reoccur again, the FBI statistics records reflect otherwise. The number of anti-Muslim hate crimes in 2016 hit its highest since 9/11. Hate crimes rose in 2016 on the basis of race and religion where 59% of the victims were targeted on the basis of their race/ethnicity/ and ancestry, followed by 21% victimized because of their religion (2016 Hate Crime Statistics, n.d.). Sadly, as a result, many AAC members do not feel as "safe" as they used to, so they decide to hide their identity as an adaptive solution. Solely motivated by fear, some females will take off their head scarf; others will limit their use of language and not feel comfortable praying in public.

Studying abroad for a high-quality education was an option I chose among many others. However, for many immigrant families fleeing warzones, it is often their only option to survive. On this note, becoming friends with many members of the AAC has been a mere humbling experience not only because it allowed me to be a part of their

social circles, but also because it has given me insight to their life challenges and obstacles.

One in every four children have at least one foreign-born parent in the US. In 2010, the US Census Bureau reported nearly 13% of the total American population to be foreign-born. The majority of the immigrants to the US come from Mexico, followed by China, India, and the Philippines respectively (U.S. Census Bureau, 2010). The AAC makes up around 0.5 percent of the total US population, and it represents a minority group that started immigrating to the US in the 1880's (Arab American Institute Foundation, 2014).

When a child is born to an immigrant family, he/she is exposed to an increased chance of facing child growth and developmental risk factors and challenges. Regardless of the family's country of origin, some of those risk factors include lack of parental citizenship, lower parental education, low socioeconomic status, and low English proficiency (Capps, Fix, Passel, Ost, & Perez-Lopez, 2003; Jung & Zhang, 2016).

Although the AAC is considered to be an under-researched population, recent studies report their unique struggle with acculturative stress, discrimination and marginalization, specifically after the terrorist attack of 9/11 (Ahmed, Kia-Keating, & Tsai, 2011; Goforth, Pham, Chun, Castro-Olivo & Yosai, 2016; and Wingfield, 2006). There have been very few studies of infants and toddlers who have immigrated with their families to the U.S. and much we do not know about how they are growing and developing within their AAC families.

I have investigated the overall developmental and risk status of a sample of toddlers from the AAC. In addition to assessing AAC children's development, I explored concurrent associations between the environmental/cultural factors and children's developmental level and risk status. My aim is to produce empirical data to inform practices and policies related to state and federal educational and social service systems, as well add to my knowledge about training early childhood professionals to work with diverse populations.

CHAPTER II

LITERATURE REVIEW

In this chapter, I first provide a background review of previous studies related to AAC immigrant families and outcomes for their young children in the US. Throughout the literature review, key terms are used as within their original articles. To review the literature, five electronic databases were considered to find peer-reviewed articles. Academic Search Premier, Eric, Medline, PsycNET, and Google Scholar were searched using key words such as: "Child Development, Delays, Risk status, Parenting, Immigrant*, Arab American*, Arab Community, Minority, Parental Stress, and Acculturation".

Existing research literature is rich with studies on early child screening, but little research has been done in terms of the developmental status of young children in the Arab American Community (AAC) in the US. For the purpose of providing a background of previous studies, a review of literature on immigrant families will be summarized, followed by studies related to the focus community, AAC. Finally, literature on early identification will be reviewed followed by studies focused on early developmental screening.

Immigrant families

The term "immigrant families" is used to describe a family unit with at least one foreign-born parent (Crosnoe & Fuligni, 2012). Immigration generally exposes individuals to "unique developmental demands and stressors" (Arbona et al., 2010; Perreira & Orneals, 2011). Families have different ways of coping with acculturative stress. One group may show a level of resistance to blend into the new cultural norms,

thinking that they might return to their country of origin, while the other focuses on reserving family functioning rules carried from the country of origin to the country of immigration or "country of adoption" (Sluzki, 1979). Parents' acculturation has been linked to language proficiency and country/culture of origin (Jung & Zhang, 2016; Sluzki, 1979; Yoo & Vonk, 2012). Immigrant parents with high English-language proficiency are more involved in their children's school education and consequently, their children's English ability and cognitive development (Jung & Zhang, 2016; Sluzki, 1979).

The country/culture of origin also affects the process of acculturation. Families immigrating to the US from European heritage (only 20%) are the closest to the American language and culture. Currently, the vast majority of immigrants with families are from non-European background and thus face greater challenges related to higher acculturative stress as well as increased challenges in child rearing (Yoo & Vonk, 2012).

Arab American Community (AAC)

Arab Americans are individuals who immigrate to the US from ancestral roots traced to Arabian countries including, but not limited to, Egypt, Iraq, Jordan, Lebanon, Palestine and Syria. According to the US Census Bureau, AAC immigrants are estimated to be over three million, settling in all 50 states, and growing over the last decades. An increase of over 72% was reported between the years 2000 and 2010, as the purpose of the immigration has changed over the years (Arab American Institute Foundation, 2014; Wingfield, 2006). During more recent times, immigration has been the only safe option for families who want to flee war in their countries, some of which remain war-torn today. Examples of on-going wars include the Somali Civil War, the Algerian Civil War,

the Second Palestinian Intifada, the Iraq War, the Gaza War in Palestine and the 2006 Lebanon War.

Obeidat and colleagues (2012) identified religion as the most important and distinctive aspect of the Arab culture. Even though not all Arabs are Muslims, Islam is the widest spread religion in the Arabian countries and is the root of the Arabic language and culture (Obeidat, Shannak, Masa'deh & Al-Jarrah, 2012).

As for the education of AAC, those who immigrated in the last 50 years obtained higher educational levels, compared to immigrants in the 1880's. In fact, in recent years, Arab Americans have tended to be more affluent and better educated than the average American (Wingfield, 2006). However, members of AAC reportedly face exploitation and discrimination in the job market, which limits their access to job opportunities and certain fields. Once in the US, a higher level of education does not necessarily reflect a high socio-economic status (Ibish, 2003).

Raising children in America

Ma (2017) conducted a systematic review on the parenting of immigrant Chinese families living in Western countries. Ma emphasized the complexity of parenting--that it is best studied through a dialectical and dynamic lens that changes over time, and that counts "culture" as one of many factors that influence parenting (Ma, 2017). Other factors are the family's length of residence and family's acculturation (Guo, 2014; Huang, Calzada, Cheng, Barajas-Gonzalez & Brotman, 2016; Huang & Lamb, 2015; Lopez, Correa-Chavez, Rogoff & Gutierrez, 2010).

The higher the number of years parents spent in the new country, the less strict immigrant parents become in terms of following a specific traditional parenting style. In

the course of acculturation, Chinese immigrant parents modified their parenting without affecting their Chinese cultural affiliation. In comparison to Chinese families who recently migrated, ones who spend a longer time in the host country use less physical discipline and are less authoritarian (Huang & Lamb, 2015).

On the other hand, AAC parents may show less involvement in their children's education when they are attending "Western schooling" (Lopez et al., 2010), and were reported to have different expectations about schools in terms of teaching, grading and required homework (Guo, 2014). Another developmental risk factor for children from AAC is the lack of parenting guidance. Often, there is a disconnection between immigrant parents and their families, who are most of the time their first source for parenting advice. Lastly, child birth order can be considered as a risk factor for immigrants as it is culturally common for older siblings to help raise their younger siblings, in ways such as feeding, helping with homework and putting them to sleep.

As immigrant parents adjust to new cultures, most often they acculturate and enculturate just by living in the host country. Acculturation is a term used to describe parents' actions to blend into the new culture, while enculturation is used to describe parents' retaining their culture of origin (Huang et al., 2016). Interestingly, this adjustment is performed on different levels: (a) assimilation: parent involvement in the new culture is high compared to it in their culture of origin; (b) separation: parent involvement in their culture of origin is high compared to it in the new culture; (c) marginalization: parent involvement is low in both the new culture and their culture of origin; and lastly, (d) integration (or biculturalism): parents are actively and simultaneously involved in both the new culture and their culture of origin (Berry, 1997).

Children's developmental status in immigrant families is influenced by levels of parents' acculturation in their new environment (Calzada, Brotman, Huang, Bat-Chava &Kingston, 2009). Studying outcomes of preschoolers living in US urban communities, Calzada and colleagues found out that children of bicultural parents had relatively higher levels of adaptive behavior compared to children of parents who were not bicultural (Calzada et al., 2009).

Parenting stress

Parenting stress is a "psychological reaction" to parents' self-expectations and demands on what they are expected to do as parents (Bender & Carlson, 2013). In general, parenting stress is higher in immigrant families than it is in others (Arbona et al., 2010; Yoo & Vonk, 2012). Yoo and Vonk (2012) studied parental stress in Korean immigrant families in the US and divided parental stressors in three categories: (a) stress due to acculturation experiences; (b) stress due to racism and discrimination experiences; and (c) stress due to the acculturative gap between immigrant parents and their children. These stressors are apparent in families from AAC as well.

Interestingly, parents of children with disabilities report relatively the same high levels of stress regardless of the immigration factors (Azar & Badr, 2006; Dardas & Ahmad, 2014; John, Bower & McCullough, 2016). In families with children with disabilities, additional factors contribute to parental stress such as the kind and severity of the child's disability, child's functionality, and behavior problems (Almogbel, Goyal & Sansgiry, 2017; Hayes & Watson, 2013; Neece, Green & Baker, 2012). In general, parents of children with developmental disabilities experience more stress compared to

parents with typically developing children (Huang, Chang, Chi, & Lai, 2014; John, Bower & McCullough, 2016).

A recent study by Luu and Neece (2019) used the Parenting Stress Index: Short Form (PSI:SF) (Abidin, 1995) to investigate parental stress among minority groups. No AAC parents were included; however, the researchers studied the moderating effect of family support on acculturation and parental stress and reported that increased parenting stress was found associated with low levels of acculturation, even in the case of high levels of family support.

Parenting stress in AAC

Factors reviewed in the literature that impact parental stress in AAC in positive or negative ways include social support and religion. Arabs are deeply family centered and culturally oriented. In their home countries, families are their first and, often times, their strongest support system. AAC immigrant families are less likely to have relatives or extended family members in the US, and therefore, often experience less family support (Miller, Votruba-Drzal & Coley, 2013). For AAC parents with children with disabilities, acculturation stressors are magnified as they are in constant struggles due to their unique immigration experience (Khanlou, Mustafa, Vazquez, Haque & Yoshida, 2015). These struggles include lack of external sources for support, as support groups are more often limited to cities that have high numbers of AAC.

One can also observe whether there is an impact of religion on levels of parental stress. For most immigrant parents, the uncertainty about the future and the unfamiliarity to the laws and systems in the hosting country are considered stressors. As Muslims believe that everything happens only when God allows it to happen, there is an

undeniable influence of religion on the individuals tolerance towards uncertain future events (Obeidat, Shannak, Masa'deh & Al-Jarrah 2012; Dardas & Ahmad, 2014). Thus, Muslims who are raising children in the US may experience stress related to different levels of acculturation between their own and that of their children. That is, if their children become more acculturated in the new environment, parents may feel they have less authority over their children and may view it as a failure in their duties as parents (Shariff, 2009). Another shared stressor among immigrant families is the fear of deportation of themselves and family members (Arbona et al., 2010).

Parenting stress was measured by the Parenting Stress Index (PSI) (Abidin, 1995) with Arabic speaking populations in the Arab world in Jordan and Lebanon (Azar & Badr, 2006; Dardas & Ahmad, 2014; Krulik et al., 1999). Recruiting participants from three different countries--USA, Israel, Japan and Jordan-- the researchers aimed to measure cross-cultural perspectives (Krulik et al., 1999). One hundred thirty-five mothers who were in hospitals accompanying their chronically ill child were asked to complete the PSI in an interview format, each in their own language. The results showed that overall parents scored above the clinical cutoff scores (that is, in need of intervention) on most of the domains of the PSI. Across all cultures, higher stress levels were reflected on the Child Domain, suggesting that mothers were stressed over their children's lack of adaptability and to their being very demanding (Krulik et al., 1999).

The Arabic translation of the PSI was used in a cross-sectional study to investigate depression symptoms among 127 Lebanese mothers of intellectually disabled children (Azar & Badr, 2006). The researchers looked into relationships among demographic characteristics and participants' depressive symptoms. Demographic

characteristics included age of mother, number of children in the family, number of household members, mothers' level of education and the family's monthly income.

Results showed a correlation between mothers' higher education level and their seeking sources of support. The researchers also reported that participating mothers tended to limit their social interaction as they avoided stigmatization by their culture. Overall, self-isolation may prevent mothers from seeking support, which oftentimes contributes to their depression (Azar & Badr, 2006).

More recently, Dardas and Ahmad (2014) used the PSI-SF to examine the psychometric properties of its shortened version in Jordan. Parents of children under 12 years of age who were diagnosed with autism spectrum disorder made up the sample. The researchers reported reliability and validity findings; however, they did not report any relationship between parental stress and cultural/religious beliefs (Dardas & Ahmad, 2014).

Developmental risk factors among immigrant communities

Children from immigrant families fall within a high-risk group as they often experience unique medical and psychosocial risk factors (DuPlessis &Cora-Bramble, 2005). The family socioeconomic status (SES) also is associated with parents' English proficiency, which in turn can affect child developmental outcomes. Higher SES parents are often more proficient English speakers (Chen et al., 2014). Parent language deficiency may limit children's exposure to English, and English speakers. As AAC parents with limited English proficiency tend to socialize with Arab speakers, this may lead to a lack of social competence in parents and limit their blending into the communities of the host country (Ahmad, 2017; Chen et al., 2013). Limited English

proficiency may also affect parent-child interaction as parents get frustrated and less involved (Lopez et al., 2010).

Effects of media exposure

In addition to language proficiency, a risk factor that has become a prominent issue for early outcomes and supportive environments for children relates to exposure of media on infants and toddlers. Exposure to media, such as TV or video screens was found to be associated with child obesity, in general and among low SES minority children in specific (Schmidt et al., 2012). The American Academy of Pediatrics (AAP Media Contacts, 2016) recommends no exposure to computers and other screens for children under 18 months of age, and limited exposure for children 18-24 months. For immigrant families, children's exposure to the media of their country of origin, as well as the hosting country can be influenced by the family's SES. According to Chen and colleagues, there is a negative correlation between the amount of use of Chinese media by immigrant parents and their children and the SES of the family (Chen et al., 2014). That is, as technology is improving, the feasibility of immigrants using their native non-English media has increased. Moreover, the use of English media was lower in firstgeneration Chinese American children compared to second-generation (Chen et al., 2014). There are no studies to date looking at exposure to media of children of AAC.

Exposure to media is particularly interesting to investigate related to immigrant families because of the potential of media to retain culture and language (e.g. children's movies in the native language) or to accelerate acculturation of children and families with exposure to the host languages. Time that children spend with media may also be related

to other parenting outcomes, i.e. children are more likely to have longer screen time when their parents engage in high levels of screen time (Jago et al., 2013).

Developmental Delays

Children experience developmental delays no matter where they are born or in what culture they are raised. Although children grow at different rates and may differ in age, they acquire certain developmental skills and there are norm approximations in which most same-aged peers acquire these skills, although there are variations in developmental norms by culture (Chen et al., 2017). The term *developmental delays*, *developmental disabilities* and *developmental-behavioral problems* are terms used to describe a child's development that is not meeting certain age expectation developmental milestones compared to the norms in that culture (AAP, 2006; Bricker, Macy, Squires & Marks, 2013).

Early identification of delays leads to improved outcomes for children and families (Yovanoff & Squires, 2006). For children of immigrant parents, early intervention (EI) is critical, and it is critical to support families in providing optimal experiences for their children, in order to mitigate developmental problems and delays. Developmental screening is the main process that is used to identify delays, either professionally completed or completed by parents. Parent completed screening has the advantage of truly partnering with parents and gathering information from the parent's perspective about their child's development. Children of immigrant families may appear to have developmental delays just by nature of their living with parents with different cultural and language practices. Identifying which are truly developmental delays in need of intervention, and which are variations in development because these diverse

experiences can be challenging. The Ages and Stages Questionnaire, Third Edition (ASQ-3) is one tool that has been shown to be culturally sensitive when translated and adapted (Charafeddine et al., 2013; Singh, Yeh & Boone Blanchard, 2017) and has been translated into Arabic for use by families living in the US (Squires & Bricker, 2018).

Developmental Screening

The American Academy of Pediatrics (AAP) defines developmental screening as "the administration of a brief standardized tool that aids the identification of children at risk of a developmental disorder." (AAP, 2006; Squires & Bricker, 2007). Although developmental screening tools play a big role in identifying children's status in developmental areas, they are not intended to determine a diagnosis. Children whose screening outcomes reflect risk status often are referred to EI services for further evaluation and surveillance, as soon as problems are identified (AAP, 2006).

There are a variety of developmental screening tools, and while the AAP does not recommend a specific one, the organization recommends regular and periodic use of standardized tools across the early childhood years. The AAP also recommends the use of screening tools that provide evidence of strong psychometric properties including reliability, validity, specificity, sensitivity, and utility (AAP, 2006). In this study I used the Ages and Stages Questionnaire (ASQ), one of the most widely used screening tools cited in research (Macy, 2012, Marks, Sjo & Wilson, 2018), and one that was a good fit for this study because of its cultural sensitivity, and availability in the native spoken language by targeted participating parents. The ASQ has been used in numerous studies internationally, in including Norway, Chile, Brazil, Korea, and China, where it has been extensively studied (Alvik & Grøholt, 2011; Armijo, Schonhaut, & Cordero, 2015;

Filgueiras, Pires, Maissonette, & Landeira-Fernandez, 2013; Heo, Squires & Yovanoff, 2008; Wei et al., 2011).

Accurate screening results require that tools be culturally informed and tested for that specific culture. The ASQ has been used in studies carried out in Arab-speaking countries including Egypt and Lebanon (Abo El Ella, Tawfik, Abo El Fotoh & Barseem, 2017; Charafeddine et al., 2013). One study was conducted by Abo El Ella, et al. (2017) and used the English version of the ASQ to assess the development and the risk for developmental disabilities among 1012 children 24-60 months old in Egypt. Interestingly, the researchers identified some demographical risk factors such as consanguinity, male gender, and parental education that affected children's overall development. Over 96% children were reported as typically developing. Children who were categorized as having suspected developmental delays included 3% in problem-solving, followed by 2% in fine motor and 1% in personal-social (Abo El Ella et al., 2017).

In Lebanon, Charafeddine and colleagues assessed the reliability and cultural acceptance of their translated version of the ASQ among Lebanese parents. They reported it was perceived with a high satisfaction rating from participating parents. With a focus more on the adaptation process, the researchers also justified the minor adaptations made to their translation by the differences in "acceptable behaviors" between one culture and the other (Charafeddine et al., 2013).

Rationale for the Study

Given the fact there is an underrepresentation of the AAC immigrant families in the research literature, and little known about the developmental status of ACC infants and toddlers in the US, this study will help fill a gap in the literature, especially on developmental and risk status and early identification (Luu & Neece, 2019). My personal experience in working with young children and families from Arabic cultures provided me with an insight to the services and resources that are available. My impressions are that these parents are experiencing significant challenges that are not recognized by the mainstream culture, and are not referred to needed services, even when they do exist. Working as an interpreter/translator connecting families and their service providers, I realized first-hand the importance of understanding of cultural backgrounds. For families with young children who are struggling to learn "the American way" as well as gain employment or schooling and provide a stable and enriched environment for their children, the risks are considerable. Hence, I hope that these findings will assist in providing service providers, community liaisons, and researchers with a better understanding of the AAC community and the developmental and risk status of toddlers living in in the US. Additionally, AAC families may benefit from these findings. There is much that can be done to understand AAC families and to assist them in being successful in the American culture.

The conceptual model steering the current investigation is represented in Figure 1. Environmental factors include child order, number of persons in the household, parenting involvement (with child's exposure to screen-time as a proxy), the support the family receives, and developmental and medical problems. Parental factors include parents' acculturation, assessed by years spent in the US and cultural affiliation. Parental factors also include family income, mothers' age and education, and parental stress.

Based on previous research, parental acculturation and risk factors contribute to child development (Huang et al., 2016; Jung & Zhang, 2016). Other research investigated

the contribution of environmental and medical factors to child development (Azar & Badr, 2006; Chen et al., 2014; Miller, Votruba-Drzal and Coley, 2013). Through the lens of this model, I hypothesized that higher scores on child development would be associated with lower scores on the PSI. I also hypothesized that higher scores on child development would be associated with higher levels of parents' acculturations (years spent in the US and annual family income). Furthermore, I hypothesized that stress levels of parents from AAC are associated with less acculturation.

The study addressed the overall research question: Do cultural background, immigration status, and parental stress affect the overall developmental status of AAC toddlers living in the US?

In the qualitative portion of the study, I report on parents' experiences raising their children in the US, the level of social support AAC parents are receiving and the access to services available to help them in parenting. I also report on acculturation techniques and involvement by families from AAC, highlighting the use of screen-time as well as the challenges they face.

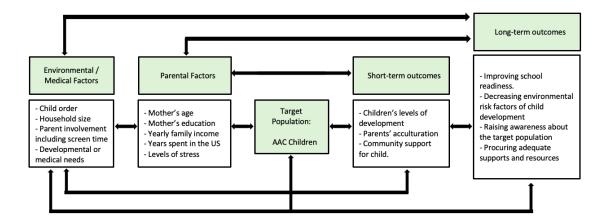


Figure 1.

Proposed Conceptual Model of Factors Impacting Arab American Toddlers' Development and Risk Status in the United States.

CHAPTER III

METHODS

A mixed methods research design was used to gather and analyze data to assist in understanding and interpreting information gathered from AAC. An online-survey and semi-standardized interviews were used to gather data.

Quantitative research questions:

- 1. What is the overall developmental status of toddlers aged 18 to 36 months old from AAC?
 - 1.1 What proportion of the sample is developing typically, in need of further evaluation and supports, or at-risk in terms of their specific areas of development?
 - 1.2 Do environmental factors such as the role of the annual family income, and years spent in the US affect AAC children's scores on the ASQ?
- 2. Are parents of toddlers aged 18 to 36 months old from AAC experiencing typical or heightened levels of parenting stress?
 - 2.1 What is the relation between AAC child development and parents' overall stress?
 - 2.2 Do environmental factors such as the role of the annual family income, and years spent in the US affect AAC parents' overall stress?

Qualitative research questions:

1. What are the techniques parents use to preserve their native culture as they raise their children and challenges they face?

- 2. What are parents' attitudes about the services and supports available to help them related to parenting their children in the U.S.?
- 3. What are the parents' thoughts about their children's exposure to video screens and media?

Participants

The total number of participants were 264 parents (mothers, fathers, or both), from AAC that matched the following inclusion criterion for recruitment: (a) a family with at least one non-US born parent, (b) the immigrant parent's country of origin is an Arabic-speaking country, and (c) families with toddlers aged 18 to 36 months old.

Procedures

Using a non-probability purposive sampling method (Remler & Van Ryzin, 2014), I recruited participants by contacting childcare centers in states with large concentrations of AAC immigrants, including the three states with the largest populations (i.e., California, Michigan and New York) (Arab American Institute Foundation, 2014).

Over 100 Instagram® accounts and FaceBook® pages and community groups were contacted to reach out to populations in other states, as well as Islamic centers, mosques.

Recruitment took place online and onsite, as notices/posters were shared on bulletin boards and websites of family resource centers, Islamic centers, and organizations' websites. Telephone and email contacts were also be made to community directors in states with large population centers.

Measures

Measures included an online survey completed by all participants, as well as an interview with interested participants. The online survey combined three outcomes

measures: a demographics form (DF), the Ages and Stages Questionnaires 3–AR (ASQ-AR), and the Parenting Stress Index: Short Form:AR (PSI – SF: AR). The survey was made available in English and Arabic via Qualtrics®; a private survey software that supports both languages (Qualtrics®, 2013). The researcher entered the measures and field tested the survey with several parents and revised according to feedback before data collection began.

In the following section, I provide a brief description of the outcome measures including the follow up survey, followed by details about the semi-standardized interview protocol and procedure. All measures can be found in Appendix A.

Demographics Form (DF). The demographics form was used to collect demographic characteristics of participating families (Child and Family Information, 2009). The original DF had 15 items. The DF was translated into Arabic and additions and modifications changes were made. Examples of changes included modifying the question on race/ethnicity to be open-ended. Changes also included adding a few items on family dynamics such as language(s) spoken at home, number of family members living in the household and child's birth order.

The Ages and Stages Questionnaires 3 – AR (ASQ3-AR). ASQ3-AR is a screening tool used with children one month to six years of age, to assess their competencies in the following domains: communication, gross motor, fine motor, problem solving, and personal-social. ASQ was developed by (Squires & Bricker, 2009) as a quick and low-cost tool to assess overall development in order to ensure that services are provided early and accurately to children (Squires & Bricker, 2009; Yovanoff &

Squires, 2006). Another reason for using the ASQ3-AR was its availability in Arabic, the language spoken by participating parents.

The total number of ASQ3-AR questionnaires available to screen the age range of 18 to 36 months is eight questionnaires (18, 20, 22, 24, 27, 30, 33, and 36-months). Each questionnaire consists of 30 multiple choice items with three options (Yes, No, and Not Yet), followed by 10 open-ended items. The psychometric properties of ASQ-3 includes test-retest reliability of 92%, sensitivity of 87.4% and specificity of 95.7% with English speaking families. The range of scores is 0-300 as the items are scored with 10 for Yes; 5 for Sometimes; and 0 for Not Yet. No specific studies have been conducted on the ASQ3-AR in the US; however, studies have been conducted in other Arabic countries and confirmed the cultural fit of the ASQ to the use with AAC (Abo El Ella, et al., 2017; Charafeddine et al., 2013).

The Parenting Stress Index: Short Form Arabic (PSI – SF:AR). PSI-SF:AR is a self-reported instrument developed by Abidin (1995) to evaluate parenting stress. The measure has three sub-scales, Parental Distress (PD); Parent–Child Dysfunctional Interaction (PCDI); and Difficult Child (DC) and has 36 items. It contains three multiple choice items and 33 five-point Likert scale items ranged from (Strongly Agree) to (Strongly Disagree). Results are interpreted according to the percentile range as follows: typical stress (15-80), high stress (81-89), and clinically significant stress (90-100).

The psychometric properties include reliability coefficients between 80% and 87% for the scaled scores and 91% for the total stress score. PSI was translated into approximately 18 languages including Arabic and was used with Arabic speaking

populations in the Arab world in its original form and its shorter form (Azar & Badr, 2006; Dardas & Ahmad, 2014; Krulik et al., 1999).

Semi-standardized interviews. Interviews are best used to understand lived experiences that are shared among a number of individuals. I chose to conduct semi-standardized interviews to gather further information on individual family experiences from AAC (Berg & Lune, 2012).

Interview preparation. At the end of the survey, parents who agreed to take part in short in-person interviews were invited to contact the researcher and express their willingness. Seventeen parents agreed and all were interviewed. Interviews took an average of 30-40 minutes. Depending on the location of each interviewee and their personal preference, one interview was conducted in person, the remaining 16 took place over the phone.

Interview process and questions. The interviews were audio recorded. Even though participants contacted the researcher, participants were asked to give a verbal consent at the beginning of the interview. They were also reminded of their right to reject answering any of the interview questions, as well as their right to withdrawal from the interview at any point. The interviews started with ice-breaking questions such as asking about the participants' day and asking them to describe their child. General questions on parents' experience raising their children in the US were then asked. Next, I asked specific questions such as, "What are the services/opportunities that have been helping you raise your child?", "Do you feel you are well-supported, socially?". Questions on culture and its influence on raising children followed, such as "What do you think are three biggest challenges raising your child in a culture different to your native culture?"

and "What are three techniques you follow, as a parent, to preserve your native culture and pass it on to your children?" Finally, I asked questions about the exposure of their toddlers to technology and its effect on their child's development. For example, "Do you think screen viewing has a positive or negative effect on your child's development?", "How does the choice of language affect the screen time in your opinion? Please elaborate? During the interviews, the parents were prompted to provide more details as needed.

coding, categorizing, and concepts

Content-driven analysis

I analyzed the data using a content-driven, thematic analysis approach given the exploratory nature of this study (Guest et al., 2012). This approach is used in organizing, describing, and making meaningful rich conclusions of collected data. To have script ready for the analysis, I transcribed all Arabic interviews and translated them into English. Then, I read through the transcribed scripts for data answering the research questions. After that, codes expressing unique ideas were extracted to form a list of codes. Finally, codes with similar ideas or *themes* were sorted into categories. It was important to make sure these categories do not overlap and were distinctive from each other. After categories were finalized, I calculated percentages of responses under each category (Braun & Clarke, 2006; Lichtman, 2010).

Inter-rater reliability

One limitation in qualitative data analysis is the possibility for researcher bias in data interpretation; in other words, the researcher finds what they are looking for, rather

than being open to emergent themes in the data (Chenail, 2011). To decrease potential for researcher bias in this study, I asked a second coder to independently code the data (Guest et al., 2012). There was determined high inter-rater agreement between the first and second coding with only two statements categorized differently and renaming one of the categories. Discrepancies were resolved through discussion.

CHAPTER IV

RESULTS

Participants

Out of 264 parents, 191 survey answers were included in the study due to incomplete answers (i.e., responses missing more than 12 items). Participants represented 11 Arab speaking countries of origin arranged by percentage of participants respectively: Jordan (27.7%), Saudi Arabia (24.6%), Syria (10.5%), Palestine (9.5%), Iraq (9.4%), Egypt (7.9%), Lebanon (4.7%), Kuwait (2.1%), Morocco (2.1%), United Arab Emirates (1%), and Libya (0.5%). Participants were residents of 32 states. Approximately 14% of the participants were from California, followed by Illinois 10.5%, Ohio 9.9%, and Texas 6.8%. The remaining participants were from 28 states, ranging from 5.8% to 0.5% of sample. Following the completion of the survey, 17 participants, from nine states, agreed to be interviewed.

Quantitative data analysis

In the following section, I review results from the online survey starting with demographic characteristics of AAC parents and children. Then, descriptive statistics for both child development and parental stress are summarized. Finally, the statistical analyses conducted to test the research hypotheses follow.

Table 1. $Demographic \ Characteristics \ of \ AAC \ Parents \ (N=191).$

Characteristics	n (%)	Characteristics	n (%)
Person filling survey		User language	
Mother	147 (77)	Arabic	79 (41.4)
Father	28 (14.7)	English	112 (58.6)
Both	16 (8.4)		
Mothers' Education		Mothers' age at child's birth	
Less than high school	7 (3.7)	Under 20	2(1)
High school	17 (8.9)	20 - 24	33 (17.2)
AA Degree	17 (8.9)	25 - 29	92 (48.3)
4 yrs college or above	149 (78)	30 - 34	44 (23.1)
I don't know	1 (0.5)	35 - 39	16 (8.3)
Yearly family income		Above 40	4 (2.1)
\$ 0 – 16,500	23 (12)	Country of origin	
\$ 16,501 – 24,500	25 (13.1)	Egypt	15 (7.9)
\$ 24,501 – 44,500	35 (18.3)	Iraq	18 (9.4)
\$ 44,501 - 60,000	43 (22.5)	Jordan	53 (27.7)
More than \$ 60,000	44 (23)	Kuwait	4 (2.1)
I don't know	21 (11)	Lebanon	9 (4.7)
Child's gender		Libya	1 (0.5)
Female	110 (57.6)	Morocco	4 (2.1)
Male	81 (42.4)	Palestine	18 (9.5)

Table 1. (continued)			
People in the household		Saudi Arabia	47 (24.6)
2 to 4	128(67)	Syria	20 (10.5)
		United Arab Emirates	2(1)
5 and more	63(33)		
Years spent in the US		Language spoken at home	
		Arabic	106(55.5)
0 to 5	101(53)		
	7 0 (2 0)	English	17(8.9)
6 to 10	58(30)		
M (1 10	22(17)	Both	67(35.1)
More than 10	32(17)		
		Other	1(0.5)

Respondents' relationships to the children were: mothers (77%), fathers (14.7%), and both parents (8.4%). Mothers' age at the birth of child ranged from 19 to 43 years (M = 28.17 years, SD = 4.71). The majority of mothers (78%) had completed a minimum of having a college degree. Participants chose English 59% of the times to complete the surveys.

When asked about number of family members in the household, the range was two to eight. With 40% families of four, followed by families of three (26%).

Approximately over 60% of AAC families were not categorized as families with low income according to the National Center for Children in Poverty (Koball, & Jiang, 2018), with 23% families earning more than \$60,000. Participants' demographics are found in Table 1.

Based on demographics collected on the survey, 110 (57.6%) of the children were females and 81 (42.4%) were males. Most of the children (94%) had not received a professional diagnosis. Diagnoses reported were speech delay, motor delay, achondroplasia, and chylomicron retention disease (Table 2).

Table 2.Demographic Characteristics of the Participating Children (N = 191).

Characteristics	n (%)	Characteristics n (%)	
Child's gender		Child's birth order	
Female	110 (57.6)	1 st	75(39.3)
Male	81 (42.4)	2^{nd}	64(33.5)
Child's professional diagnosis		3 rd	27(14.1)
Yes	11 (5.8)	4 th	21(11)
No	180 (94.2)	5 th	3(1.6)
		$6^{ m th}$	1(0.5)

Descriptive statistics of AAC child development

Means (*M*) and standard deviations (*SD*) were calculated for all eight age intervals from 18 to 36 months for the development of AAC children on the five areas of development on the ASQ:AR. Most AAC children 126 (66%) scored above the cut-off scores in all areas of development; 40 (21%) were below cut-off scores in one area; and 25 (13%) were below cut-off scores in two areas or more. Results for selected ASQ:AR age intervals are summarized in Table 3 for each development domain. For the

interpretation of the ASQ:AR data, I used cutoff scores established for the US sample.

Table 4 reflects the cutoff points by age group and area of development.

Table 3.Descriptive Statistics of ASQ Scores for Selected Intervals

Age Interval	n	Com Mean(SD)	GM Mean(SD)	FM Mean(SD)	ProSo Mean(SD)	PerSo Mean(SD)
18	25	43.00(11.46)	54.40(9.2)	47.40(14.15)	41.00(11.81)	48.00(9.79)
20	12	42.92(13.73)	54.58(5.82)	49.58(8.12)	44.58(8.39)	50.42(8.91)
22	18	31.94(19.94)	37.50(16.56)	40.56(13.70)	38.61(13.70)	43.06(15.26)
24	28	39.11(20.19)	50.71(10.98)	45.18(11.50)	41.96(10.57)	43.39(12.25)
27	38	45.66(13.81)	45.92(14.04)	36.45(13.60)	44.13(7.91)	41.32(10.11)
30	31	49.84(14.58)	46.77(12.29)	41.77(16.20)	48.68(11.31)	48.87(8.24)
33	9	43.89(18.50)	53.33(10.90)	43.89(10.54)	43.33(12.99)	48.33(11.18)
36	30	50.83(11.45)	51.33(8.30)	39.17(27)	47.93(10.77)	45.83(10.51)

Com: communication; GM: gross motor; FM: fine motor; ProSo: problem solving;

PerSo: personal social

 Table 4.

 ASQ3 Cutoff Points by Age Group and Area of Development

Age Interval	Com	GM	FM	ProSo	PerSo
18	13.06	37.38	34.32	25.74	27.19
20	20.50	39.89	36.05	28.84	33.36
22	13.04	27.75	29.61	29.30	30.07
24	25.17	38.07	35.16	29.78	31.54
27	24.02	28.01	18.42	27.62	25.31
30	33.30	36.14	19.25	27.08	32.01
33	25.36	34.80	12.28	26.92	28.96
36	30.99	36.99	18.07	30.29	35.33

Descriptive statistics of AAC parental stress

Following the PSI-SF scoring guidelines provided in the manual, percentile scores were calculated (Abidin, 1995). On the total stress scale, 48.2% scored within the typical stress, 16.8%, scored within the high stress, and 35.1% scored within the clinically significant stress percentiles (see Table 5).

 Table 5.

 Descriptive Statistics of AAC Parental Stress

Stress level	Percentile range	n (%)
Typical stress	15-80	92 (48.2)
High stress	81-89	32 (16.8)
Clinically significant stress	90-100	67(35.1)

Environmental factors and child development

The relation between child development and the environmental factors (annual family income, and years spent in the US) was analyzed using a two-way, between-subjects analysis of variance. The dependent variable was children's overall scores on the ASQ:AR. There were two independent variables: annual family income, and years spent in the US. The ASQ:AR overall scores were coded (0=above cut-off score, 1= one area below cut-off scores, and 2= two and more areas below cut-off scores). Descriptive statistics for the ASQ:AR overall scores are (M = 0.46, SD = 1.71). Table 6 provides a summary for coded ASQ scores. The analysis of variance summary table is reported in Table 7. Results showed was no significant effect of the annual family income and years spent in the US on AAC children's ASQ scores. There was insufficient evidence to reject the null hypothesis, F(10, 173) = 1.69, p > .05.

Table 6Descriptive Statistics of Coded ASQ Scores for Selected Intervals

Age Interva	n	Com Mean(SD)	GM Mean(SD)	FM Mean(SD)	ProSo Mean(SD)	PerSo Mean(SD)
18	25	0.20(0.41)	0.28(0.61)	0.44(0.82)	0.52(0.82)	0.16(0.37)
20	12	0.42(0.80)	0.08(0.29)	0.33(0.49)	0.33(0.49)	0.25(0.45)
22	18	0.78(0.81)	0.83(0.86)	0.50(0.79)	0.78(0.81)	0.61(0.92)
24	28	0.71(0.90)	0.54(0.79)	0.61(0.85)	0.36(0.56)	0.64(0.83)
27	38	0.37(0.63)	0.37(0.66)	0.58(0.60)	0.24(0.49)	0.47(0.69)
30	31	0.32(0.70)	0.65(0.95)	0.42(0.72)	0.16(0.52)	0.19(0.48)
33	9	0.67(1)	0.22(0.67)	0(0)	0.33(0.50)	0.44(0.53)
36	30	0.40(0.68)	0.37(0.67)	0.47(0.63)	0.30(0.65)	0.50(0.73)

Table 7

Analysis of Variance Summary Table for the effect of Annual Family Income by Years

Spent in the US on AAC Child Development

Source	df	SS	MS	F
Annual income	5	54.46	10.89	1.91
Years in the US	2	1.87	0.93	0.16
Income by years	10	96.24	9.62	1.69
Error	173	985.03	5.69	
Total	190	1137.60		

Note. Unique sums of squares are used so the sums of squares to not sum to total. Annual Family Income by Years Spent in the US is a between-subjects effect.

Environmental factors and parental stress

The relation between parental stress and the environmental factors (annual family income, and years spent in the US) was analyzed using a two-way, between-subjects analysis of variance. The dependent variable was parent scores on the PSI:SF-AR. There were two independent variables: annual family income, and years spent in the US. The PSI:AR overall scores were coded (0= typical stress, 1= high stress, and 2= clinically significant stress). Descriptive statistics for the PSI:SF-AR overall scores are (M = .87 years, SD = .90). The analysis of variance summary table is reported in Table 8. There was no significant effects of the annual family income and years spent in the US on AAC parental stress. There was insufficient evidence to reject the null hypothesis, F(10, 173) = 1.30, p > .05.

Table 8

Analysis of Variance Summary Table for the effect of Annual Family Income by Years

Spent in the US on AAC Parental Stress

Source	df	SS	MS	F
Annual income	5	2.91	0.58	1.16
Years in the US	2	0.43	0.02	0.04
Income by years	10	6.54	0.65	1.30
Error	173	87.02	0.50	
Total	190	96.90		

Note. Unique sums of squares are used so the sums of squares to not sum to total. Annual Family Income by Years Spent in the US is a between-subjects effect.

Child development and parental stress

A Pearson r was conducted to examine the relationships between AAC child development and parental stress. The results showed a significant correlation, r(189) = .322, p < .001, showing that children with developmental scores under the cutoff score in one developmental area or more (i.e., indicating possible developmental risk) were likely to have parents with higher levels of stress. This correlation is presented in Table 9.

Table 9Correlation for Child Development and Parental Stress (N = 191)

	Parental Stress	Child Development
Child development	.322**	1
Parental stress		

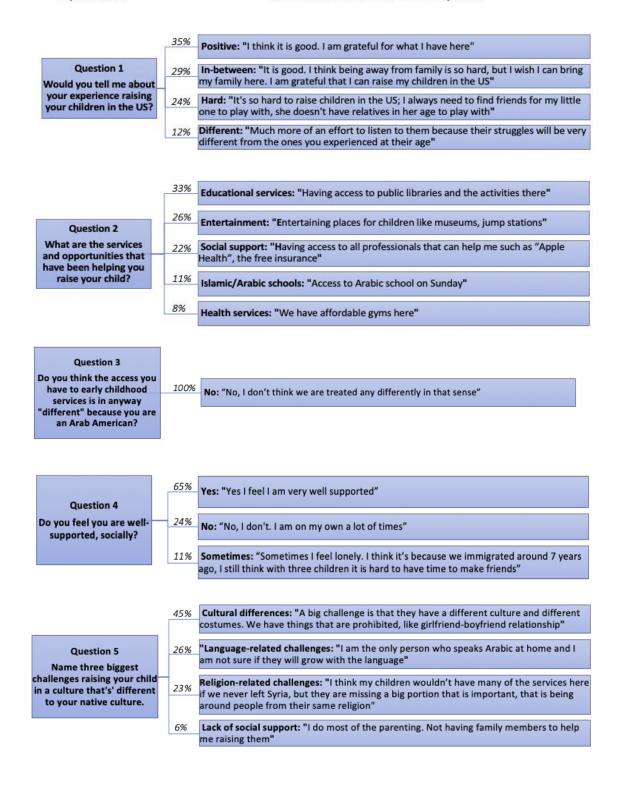
Note. **Correlation is statistically significant at the .01 level.

Qualitative data analysis

Through the content-driven thematic analysis of interviews, I extracted parents' responses to each of the 11 questions and sorted them into categories (Braun & Clarke, 2006). Figure 2 provides a visual illustration of participants' responses to interview questions.

QUESTIONS

CATEGORIES and ILLUSTRATIVE QUOTES



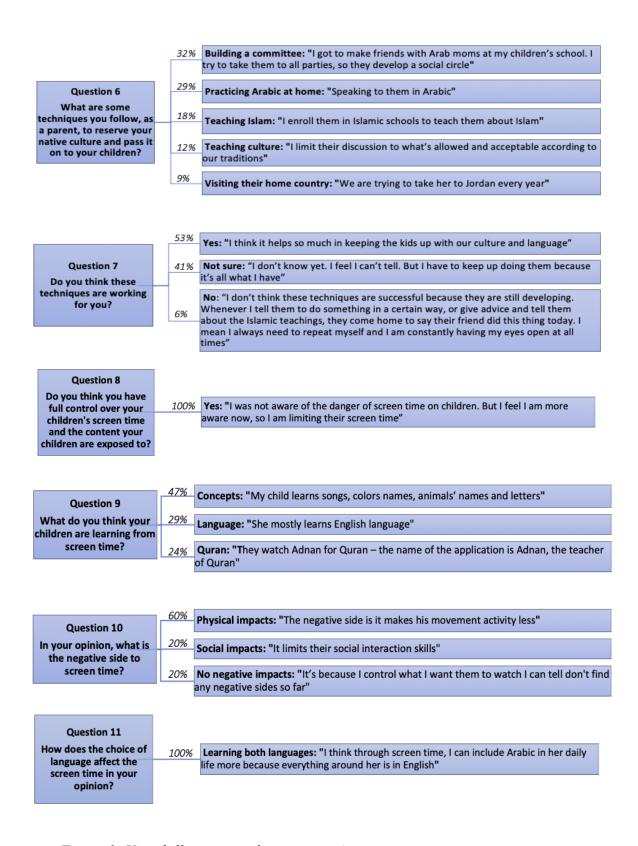


Figure 2: Visual illustration of participants' responses

CHAPTER V

DISCUSSION

Overall, my results showed that the majority of the AAC children were developing within the typical range of development, with 66% of the sample scoring above the cutoff scores on the ASQ:AR. It also showed 53% of AAC parents experienced high levels of stress. Two environmental factors were tested to find possible relations with child development and parental stress. Those factors were annual family income and years spent in the US. A discussion on these two findings and the environmental factors related to them are discussed below.

A high percentage of the sample scored within the overall typical range of development (66%). AAC children scored the lowest scores on the communication scale, and highest on the gross motor scale. Among the eight age intervals, children within the 22-months-old scored lower on their overall development compared to the rest age intervals.

Low SES is a risk factor to child development in immigrant families (Capps et al., 2003). Aside from AAC, parental stress was associated with in Hispanic minority groups from low SES background and struggling with acculturation (Huston, McLoyd, & Garcia Coll, 1994). My findings reported no significant relation between AAC parental stress or child development and annual family income. Also, number of years spent in host countries were proven to contribute to acculturation, (Huang & Lamb, 2015). However, I found no evidence of an association between years spent in the US and either AAC parental stress or child development.

Parental stress may be the result of reactions from other experiences such as war trauma after fleeing warzone and leaving family members behind (Chow & Yuen, 2000). AAC families immigrated to the US hoping for a safe environment to raise their children (Wingfield, 2006). This finding is confirmed as parents commented on appreciating the services here in the US as compared to the ones they have at their country of origin, "I think my children wouldn't have many of the services here if we never left Syria, but they are missing a big portion that is important, that is being around people from their same religion". However, parents also expressed trying to keep the connection between their children and their country of origin. "We are trying to take her to Jordan every year"; "I visit back home annually"; and "I try to visit family members back home".

The sample revealed a majority of children scoring within the typical range of development, and there was no mention of lack of services by any parents. Parental stress, though, was somewhat reflected in the frustration parents have in their overall experience of raising their children in the US and lacking social support. Although 35% of the sample reported their experience as being positive, over 70% described it as inbetween, hard, different than theirs. A glimpse into the frustration is also revealed in the conversations about challenges parents face to preserve their culture and raising their children in a social isolation (Miller et al., 2013). One parent commented, "When I had my second child, I didn't have anyone to be with me. I thought if my husband had to stay with my daughter then I will go to labor alone".

Since a question on language proficiency may be sensitive for participants to answer, I only asked about the language spoken at home. Over 50% of the participants spoke Arabic to their children at home and 35% spoke both English and Arabic. Findings

from this study echo Ahmad (2017) who proposed that because of lack of English proficiency, immigrant parents tend to limit their blending into the communities of the host country. In the interviews, some parents used community building as a technique to reserve the culture while also trying to help their child acculturate in the host country. "I try to hang out with friends from the Arabic background, but I also want her to feel comfortable with her American friends too".

Although AAC is a group that overall experiences acts of discrimination post the terrorist attack of 9/11, (Ahmed et al., 2011; Goforth et al., 2016; and Wingfield, 2006), findings from this study showed that parents did not think their access to services was limited due to their background. I did not ask parents if they experienced any discrimination and marginalization behavior, but all respondents reported receiving equal child services as everybody else. In previous research, discrimination in opportunities in the job market was reported (Ibish, 2003), which might have contributed to the high level of stress that AAC parents experience.

Previous research showed that immigrant parents have less school involvement in their children's Western schooling, and have different academic expectations (Guo, 2014; Lopez et al., 2010). In my interviews, parents expressed wanting their children to catch up with the curricula they have in their country of origin. One of the parents expressed, "I teach them the curriculum we have in Libya, so they catch up with the children back home". Moreover, many AAC parents counted teaching Arabic as a challenge to raising their children in the US, "It's hard for me to teach him our native language (Arabic) while all people around him speak English".

There are a few examples of Arabic schools in the US that are either funded by Arabian governments, such as the King Abdullah Academy in Virginia, or ones that offers the same curricula in Arabian countries, such as the Libyan Schools USA, with its branches in Colorado, Missouri and Michigan. Most often AAC parents are left with the option to take their children to mosques or Sunday schools. Those are mainly dependent on community efforts and funds ("King Abdullah Academy", n.d.; "Libyan School USA," n.d.).

As Arabic is the language of religion (Obeidat et al., 2012), AAC parents tend to pair religion and language when naming their struggles, "Teaching them the religion and the language", and "Religion and language are the hardest". Interestingly, parents tended to also provide both language and religion in their children's exposure to media.

Immigrants used native non-English media as a way of acculturation (Chen et al., 2014). All my participating parents narrated taking full control of their children's media exposure. For over 50% of the times, they reported purposely teaching them Arabic and Quran. Overall parents thought that media is a technique that helps them preserve their culture while teaching their children some of the age-appropriate concepts such as letters, numbers and colors.

Schmidt et al., (2012) found an association between child obesity and their exposure to media, especially in families with low SES. The majority of my sample did not fall within the low SES, and although they expressed some physical negative impacts of screen-time, they did not name obesity. Instead, they expressed specific concerns about physical changes happening to the brain and vision, "Kids who use screens for more than seven hours per day show physical changes to the brain in the form of

premature thinning of the cortex. It will likely be decades before scientists truly understand how smartphones and other technologies affect the brain", and "looking at a screen for extended periods of time can cause computer vision syndrome. The symptoms: strained, dry eyes, blurred vision, and headaches. Poor posture when using screens combined with can cause chronic neck, shoulder, and back pain".

Study Implications

My findings indicated that parents find it challenging to raise children in a different culture, specifically mentioning their inability to celebrate their religious holidays as individuals from other beliefs do. Although it might not be feasible to have a national holiday on such days, some states, workplaces, and schools are allowing parents and children from AAC families to have a later start in their school day or workday. Such an adjustments reflects a sense of community and inclusion that AAC parents are lacking.

In my study, parents reported some specific cultural aspects that they pass on to their children other than language, such as, traditional stories and food. To address this concern, daycare centers and schools can contribute by talking about different kinds of food, bringing diversity in storytelling and making opportunities where children, and their parents, get the chance to share their costumes.

Approximately 44% of the AAC children were below the cutoff scores on the developmental screening assessment in one or more of the development domains; approximately 6% of them were reported to receive professional diagnoses and services. Many of the Arabic countries are now just establishing EI services; there may be less

parental awareness about what it means to receive special services for developmental delays. From my personal experience working with AAC families in Oregon, I came across a couple of parents who perceived the home visit services as babysitting of their child.

On the other hand, parents experience stress that related to needing information -parents stressing about finding medical information on their child's disability or
medication (Khanlou et al., 2015). With so much information from unreliable resources
being available online, they find it difficult to obtain unbiased information. Raising
parental awareness by providing parents with handouts and or online resources in Arabic
might be one solution. Such awareness activities should be continuously evaluated to
ensure the information is accurate and up-to-date.

Limitations

This study was subject to some limitations. One of the limitations was related to sampling. Although it was promising that the demographics represented over 30 states, there was not enough time or funds to purposely recruit equal numbers of participants from these states, or to reach out to more. Similarly, numbers of participants in each age intervals were not close to equal. For example, I had 38 participants in the 27-month-interval, but only nine in the 33-month-interval. Such discrepancy makes it hard to interpret data by ASQ age interval.

Another limitation was participants' attrition. Total participants accessing the online survey was 264, however, 37 (14%) of them were excluded from analyses because of incompletion of the survey. There were no known reasons as to why parents did not

complete the surveys, and they were free to stop at any point in completing the survey. A final limitation was that the measurement tools used were not validated for AAC. We used cutoff scores from the English versions of both ASQ:AR and PSI:SF-AR.

Population-specific cutoff scores were not established yet for either measures.

A last limitation was related to measuring acculturation. I used parents' annual income and years spent in the US as proxy to measure acculturation. Although including a measure of acculturation would have provided a more specific understanding of parents' acculturation such as the Brief Acculturation Scale (Meredith et al., 2000), adding more items to the survey was not feasible due to its length. In addition, questions specific to acculturation might have decreased parents' willingness to participate overall and might have added to their anxiety about the project.

Future Directions

As this study was limited to children from 18-36 months of age, future research could examine a wider age range, starting from birth to six years of age. Studies in the future may consider validating both ASQ:AR and PSI:SF-AR, as different cultures may have different cutoff scores. Future research efforts may recruit a larger, stratified sample for a clearer understanding of child development in AAC families. A closer investigation of the areas of development will provide an in-depth understanding on how children are developing in each of the areas. Also, comparisons between the ASQ scores across different cultures and populations would help us understand how uniquely some children develop based on their background and what factors contribute to their development.

Social Validity

Although I did not use a measure for social validity in this study, the feedback received by AAC parents was overwhelmingly positive. Examples included parents not accepting gift cards to others expressing their satisfaction and gratefulness. For example, one comment was, "The work you are doing is impacting us as new parents directly. All the luck with your study". Parents also expressed enjoying the survey used and acknowledging its importance in the interaction with their children "Thank you, this was fun to fill. It made me think about my child's development, and what she can and can't do". Other parents offered free consultation/assistance in the analyses of data "I would like to offer my help in your data analysis and visualization because the work you are doing is impacting us as new parents directly".

Furthermore, the use of social media in the online recruitment has taken the recruitment internationally with the contribution of social media influencers', with over 50.000 followers, reposting the flyer on their accounts. Arab immigrant parents in Europe and Canada have reached out to us expressing their interest in the study and were provided with some resources about overall child development and developmental screening.

Conclusion

This study was conducted to fill the gap about the child development of 18-36 months old from AAC. I knew little about the AAC being a minority-underrepresented group, and investigated the overall developmental and risk status of 191 toddlers. I asked parents to fill an online survey containing an overall screening of development, the Ages and

Stages Questionnaire (ASQ3:AR), the Parental Stress Inventory: Short Form - Arabic (PSI:SF -AR) and a demographic form. More than half the children in my sample scored within the typical range. A correlational statistic between child development and parental stress was significant, indicating that children with developmental scores under the cutoff score in one developmental area or more were likely to have parents with higher levels of stress. No relationship was reported between environmental factors on toddlers' development and parental stress. Seventeen parents were interviewed for an in-depth understanding of their experience raising their children in the US. Qualitative data were analyzed using a content-driven thematic analysis. Parents mentioned cultural differences, religion and language related challenges as main challenges. They revealed some of the techniques parents used to overcome their challenges were building a community, practicing Arabic and teaching them about religion and culture.

This is the first step in understanding toddler developmental status and parental strengths and stresses related to parenting ACC children in the US culture. I hope to continue these efforts to support AAC parents to use available resources to raise their quality of life to the best possible. Improving developmental outcomes and providing parent supports will all lead to a successful and thriving immigrant community both in the US and elsewhere where immigrants are raising their children without many of the typical family and community supports.

APPENDIX

OUTCOME MEASURES

Demographics Form (DF)

1. Child's Gender: Male Other
2. Child's Race/Ethnicity:
3. Child's weight at birth less than 3lb/ 1.3: yes no
4. Mother's level of education: Less than high school High School AA Degree,4 yrs college or above Don't know
5. Mother's age at birth of child: (participant write-in)
6. Person answering questions: MotherFatherBoth parentsGrandparent(s)GuardianFoster parentAdoptive parent(s)TeacherHome visitorChild care providerOther
7. Yearly Family Income: _\$ 0 - 16,500
8. State/Province:
9. Postal Code: (participant write-in)
10. Does your child have a professionally diagnosed disability or developmental delay?yesno
11. If yes, please explain: (what disabparticipant write-in)
12. Who diagnosed your child? Physician Psychiatrist Psychologist Other professional
13. Does your child receive special services? yesno
14. If yes, please explain: (what services – participant write-in)
15. Language spoken at home Arabic English Both

17. On average, how long is your child's daily intentional exposure to screens?
() Less than 2 hours () 2-4 hours () 4 hours and more
18. On average, how long is your child's daily unintentional exposure to screens?
() Less than 2 hours () 2-4 hours () 4 hours and more

16. Child birth order

Demographics Form (Arabic)

معلومات عامة عن الطفل والعائلة
جنس الطفل
الأصل/ أصول عرقية للطفل
وزن الطفل عند الولادة أقل من ٣ باوند / ١,٣ كيلو. نعم (). لا().
آخر مؤهل تعليمي حصلت عليه الأم أقل من الثانوية العامة الثانوية العامة دبلوم عالمي بكالوريوس أو أعلى لا أعرف
عمر الأم عند ولادة الطفل
الشخص الذي يملأ الاستبانة الأم الأب الوالدين معا والد/ والدة بالتبني
الدخل السنوي للأسرة 0 16,500 \$ 0 - 16,500 8 16,501 - 24,500 24,501 - 44,500 0000 \$ 44,501 \$ اكثر من \$60,000
الولاية الرمز البريد <i>ي</i>
و و بوت ي هل تم تشخيص طفلك بإعافة أو تأخر نمائي من قبل أحد المختصين؟ ماهو التشخيص إذا كانت الإجابة نعم نعم لا
الشخص الذي قام بتشخيص طفلك هوطبيب طبيب نفسي طبيب نفسي _أخصائي نفسي _تخصص آخر
هل يتلقى طفلك أي خدمات خاصة؟ ماهي الخدمات إذا كانت الإجابة بنعم نعم

العربية والإنجليزية	ت الإنجليزية	اللغة المتحدثة في البير العربية
	فوان - إن وجد	ترتيب الطفل بين الأخ
	المنزل	عدد أفراد الأسرة في
شات عن قصد	مدة تعرض طفلك للشا ت	ماهو المعدل اليومي ا أقل من ساعتين من ٢-٤ ساعات أكثر من ٤ ساعاد
شات بدون قصد	لمدة تعرض طفلك للشا ت	ماهو المعدل اليومي ا أقل من ساعتين من ٢-٤ ساعات أكثر من ٤ ساعاد

The Ages and Stages Questionnaires 3

18 months interval

Communication:

- 1- When your child wants something, does she tell you by pointing to it?
- 2- When you ask her to, does your baby go into another room to find a familiar toy or object? You might ask, "Where is your ball?" or say, "Bring me your coat" or "Go get your blanket."
- 3- Does your baby/child say four or more words in addition to "Mama" and "Dada"?
- 4- Does your child imitate a two-word sentence? For example, when you say a two-word phrase, such as "Mama eat," "Daddy play," "Go home," or "What's this?" does your child say both words back to you? (Mark "yes" even if his words are difficult to understand.)
- 5- Without your showing him, does your child point to the correct picture when you say, "Show me the kitty" or ask, "Where is the dog?" (He needs to identify only one picture correctly.)
- 6- Does your child say two or three words that represent different ideas together, such as "See dog," "Mommy come home," or "Kitty gone"? (Don't count word combinations that express one idea, such as "Bye-bye," "All gone," "All right," and "What's that?")

 Please give an example of your child's word combinations:

Gross motor

1- Does your baby/child bend over or squat to pick up an object from the floor and then stand up again without any support?

- 2- Does your baby/child move around by walking, rather than by crawling on his hands and knees?
- 3- Does your child walk well and seldom fall?
- 4- Does your child climb on an object such as a chair to reach something she wants? (For example, to get a toy on a counter or to "help" you in the kitchen.)
- 5- Does your child walk down stairs if you hold onto one of her hands? She may hold onto the railing or wall. (You can look for this at a store, on a playground, or at home.)
- 6- When you show your child how to kick a large ball, does he try to kick the ball by moving his leg forward or by walking into it? (If your child already kicks a ball, mark "yes" for this item.)

Fine motor

- 1- Does your baby/child throw a small ball with a forward arm motion? (If he simply drops the ball, mark "not yet" for this item.)
- 2- Does your baby/child stack a small block or toy on top of another one? (You could also use spools of thread, small boxes, or toys that are about 1 inch in size.)
- 3- Does your baby/child make a mark on the paper with the tip of a crayon (or pencil or pen) when trying to draw?
- 4- Does your baby/child stack three small blocks or toys on top of each other by herself?
- 5- Does your child turn the pages of a book by himself? (He may turn more than one page at a time.)
- 6- Does your child get a spoon into her mouth right side up so that the food usually doesn't spill?

Problem solving

- 1- Does your baby drop two small toys, one after the other, into a container like a bowl or box? (You may show him how to do it.)
- 2- After you have shown your baby how, does he try to get a small toy that is slightly out of reach by using a spoon, stick, or similar tool?
- 3- After a crumb or Cheerio is dropped into a small, clear bottle, does your child turn the bottle upside down to dump it out? (You may show her how.) (You can use a soda-pop bottle or a baby bottle.)
- 4- Without your showing him how, does your child scribble back and forth when you give him a crayon (or pencil or pen)?
- 5- After watching you draw a line from the top of the paper to the bottom with a crayon (or pencil or pen), does your child copy you by drawing a single line on the paper in any direction? (Mark "not yet" if your child scribbles back and forth)
- 6- After a crumb or Cheerio is dropped into a small, clear bottle, does your child turn the bottle upside down to dump out the crumb or Cheerio? (Do not show her how.)

Personal-social

- 1- While looking at himself in the mirror, does your child offer a toy to his own image?
- 2- Does your baby/child play with a doll or stuffed animal by hugging it?
- 3- Does your baby/child get your attention or try to show you something by pulling on your hand or clothes?
- 4- Does your child come to you when she needs help, such as with winding up a toy or unscrewing a lid from a jar?
- 5- Does your child drink from a cup or glass, putting it down again with little spilling?

6- Does your child copy the activities you do, such as wipe up a spill, sweep, shave, or comb hair?

Overall items

- 1- Do you think your child hears well? If no, explain:
- 2- Do you think your child talks like other toddlers his age? If no, explain:
- 3- Can you understand most of what your child says? If no, explain:
- 4- Do you think your child walks, runs and climbs like other toddlers his age? If no, explain:
- 5- Does either parent have family history of childhood deafness or hearing impairment? If yes, explain:
- 6- Do you have concerns about your child's vision? If yes, explain:
- 7- Has your child had any medical problems in the last several months? If yes, explain:
- 8- Do you have any concerns about your child's behavior? If yes, explain:
- 9- Does anything about your child worry you? If yes, explain

The Ages and Stages Questionnaires 3 – AR (ASQ3-AR)

استبانة ١٨ عشرة شهرًا

مهارات التواصل:

- ١- إذا أراد طفلك شيء ما، هل يخبرك عنه من خلال الإشارة إليه؟
- ٢- عندما تسأل طفلك عن شيء مألوف له، هل يذهب للغرفة الأخرى ليبحث عنه؟ (يمكنك أن تسأله: "أين الكرة؟ أو
 أن تطلبه "احضر لي قميصك" أو "احضر لي بطانيتك")
 - ٣- هل يقول طفلك ثمان كلمات أو أكثر بالإضافة إلى كلمتى "ماما" و"بابا"؟
 - ٤- هل يردد طفلك جملة مكونة من كلمتين بعد أن تقال له؟ كأن تقول له: "ماما تأكل"، أو "بابا يلعب"، أو "اذهب للبيت" (اختر "نعم" حتى لو كان نطقه للكلمات غير واضح.)
 - ٥- هل يشير طفلك إلى الصورة الصحيحة عندما تقول له مثلًا: "أرني القطة"، أو تسأله: "أين الكلب؟" دون أن تساعده (عليه أن يعرّف صورة واحدة بنجاح لتختار "نعم")
- ٦- هل يركب طفلك ما بين كلمتين إلى ثلاث كلمات مختلفة في جملة لتعبر عن فكرة ما؟ كأن يقول" شاهد الكلب"، أو
 " أمي عودي للمنزل"، أو "القطة رحلت". (لا تختر "نعم" إذا استخدم طفلك كلمات متكررة أو عبارات سائدة مثل"
 "باي باي"، أو "مع السلامة"، أو " ما هذا؟"، أو "لو سمحت".) اكتب جملة طفلك بالفراغ التالي:

المهارات الحركية الكبرى:

- ١- هل يميل طفلك بنفسه إلى الأسفل ليلتقط شيئًا من الأرض، ثم يقف مرة ثانية على قدميه دون الحاجة إلى المساعدة؟
 - ٢- هل يتنقل طفلك ماشيًا بدلًا من أن يحبو على يديه وركبتيه؟
 - ٣- هل يمشي طفلك جيداً ونادراً ما يقع على الأرض؟
- ٤- هل يصعد طفلك فوق كرسي أو غيره للوصول إلى ما يريد؟ (كأن يستخدم الكرسي للوصول إلى لعبة فوق الرف
 أو ليساعدك في المطبخ؟)
- ٥- هل ينزل طفلك درجات السلم ممسكًا بإحدى يديك؟ (يمكن لطفلك أن يمسك بدر ابزين أو مقابض السلم أو أن يستند إلى الجدار. يمكنك ملاحظته في السوق أو في ساحة الألعاب أو المنزل)

ت- عندما تُري طفلك كيفية ركل الكرة، هل يحاول ركلها بتحريك ساقه إلى الأمام أو بالمشي تجاه الكرة؟ (إذا كان قادرًا على ركل الكرة في هذا السن، اختر "نعم")

المهارات الحركية الدقيقة:

- ١- هل يرمي طفلك كرة صغيرة بتحريك ذراع إلى الأمام؟ (إذا أسقطها إلى الأسفل أو إذا وقعت منه، اختر "ليس بعد".)
 - ٢- هل يضع طفلك لعبة صغيرة فوق الأخرى أو مكعبًا فوق الأخر؟ (يمكن أن تكون بكرات خيط، أو صناديق
 صغيرة، أو ألعاب حجامها 2.5 سنتيمترًا تقريبًا)
 - ٣- هل يضع طفلك علامة على الورقة باستخدام قلم تلوين أو قلم رصاص أو حبر؟
 - ٤- هل يضع طفلك ثلاث ألعاب أو مكعبات صغيرة فوق بعضها؟
 - ٥- هل يقلب طفلك صفحات كتاب بمفرده؟ (قد يقلب أكثر من صفحة في ذات الوقت)
 - ٦- هل يضع طفلك ملعقة الطعام في فمه بطريقة صحيحة بحيث لا يسقط منها الطعام؟

مهارات حل المشكلات:

- ١- هل يُسقط طفاك لعبتين الواحدة تلو الأخرى في وعاء أو صندوق؟ (يمكنك أن تريه كيف يفعل ذلك)
- ٢- هل يحاول طفلك الوصول إلى لعبة صغيرة بعيدة عن متناول يديه مستخدمًا ملعقة أو عصا أو أي أداة أخرى، بعد
 أن تريه كيف يفعل ذلك؟
- ٣- هل يقلب طفلك قارورة شفافة ليستخرج منها كسرة خبز وقعت فيها -بحجم حبة الفول تقريبًا-؟ (يمكنك أن تريه
 كيف، كما يمكنك استخدام قارورة ماء أو قارورة حليب الطفل)
- ٤- هل يخربش طفلك على الورقة ذهابًا وإيابًا عندما تقوم بإعطائه قلم تلوين أو قلم رصاص أو حبر، من دون أن تريه
 كيف يفعل ذلك؟
 - ٥- بعد أن يشاهدك طفلك ترسم خطًا من أعلى الصفحة إلى أسفلها، هل يقادك برسم خط على الصفحة بأي اتجاه كان مستخدماً قلم تلوين أو قلم رصاص أو حبر. (اختر "ليس بعد"، إذا كان طفلك يخربش بعشوائية ذهابًا وإيابًا)
- ٦- هل يقلب طفلك قارورة شفافة ليستخرج منها كسرة خبز وقعت فيها -بحجم حبة الغول تقريبًا-؟ (لا تريه كيف يفعل
 ذلك)

المهارات الشخصية الاجتماعية:

- ١- بينما ينظر طفلك إلى المرآة، هل يحاول أن يناول اللعبة التي بين يديه النعكاس صورته في المرآة؟
 - ٢- هل يحضن طفلك دميته أو لعبته أثناء اللعب؟
 - ٣- هل يحاول طفلك جذب انتباهك أو لفت نظرك إلى شيء ما بسحب يدك أو ملابسك؟
 - ٤- هل يأتي طفلك إليك عندما يحتاج مساعدتك في فتح غطاء علبة مثلاً أو تشغيل لعبة؟
 - ٥- هل يشرب طفلك من كوب ثم يعيده إلى مكانه؟ حتى وإن انسكب القليل من السائل؟
 - ٦- هل يقلد طفلك بعض أفعالك كمسح الأرض أو الكنس بالمكنسة، أو الحلاقة، أو تمشيط الشعر؟

المعلومات العامة:

- ١- هل تعتقد أن طفلك يسمع جيداً؟ إذا كانت الإجابة "لا"، أضف شرحًا:
- ٢- هل تعتقد أن طفلك يتكلم مثل الأطفال بنفس عمر ه؟ إذا كانت الإجابة "لا"، أضف شرحًا:
 - ٣- هل تفهم معظم ما يقول لك طفلك؟ إذا كانت الإجابة "لا"، أضف شرحًا:
- ٤- هل تعتقد أن طفلك يمشى، ويجرى، ويتسلق مثل الأطفال بنفس عمره؟ إذا كانت الإجابة "لا"، أضف شرحًا:
- ٥- هل لدى أي من والدي الطفل تاريخ أسري بضعف السمع، أو الصمم؟ إذا كانت الإجابة "نعم"، أضف شرحًا:
 - ٦- هل هناك ما يقلقك بخصوص بصر طفاك؟ إذا كانت الإجابة "نعم"، أضف شرحًا:
 - ٧- هل اشتكى طفاك من مشكلات صحية في الأشهر الماضية؟ إذا كانت الإجابة "نعم"، أضف شرحًا:
 - ٨- هل هذاك ما يقلقك بخصوص سلوكيات طفلك؟ إذا كانت الإجابة "نعم"، أضف شرحًا:
 - ٩- هل هذاك ما يقلقك بخصوص طفلك بصورة عامة؟ إذا كانت الإجابة "نعم"، أضف شرحًا:

The Parenting Stress Index: Short Form (PSI – SF)

me			Gender	Dat	e of birtl	1	_/		1	
	group									
ild	s name		Child's gender	Chi	ld's date	of birtl	h_	_/	_/	_
	SA = Strongly Agree	A = Agree	NS = Not Sure	D = Disagree	SD =	Stron	alv	Disagr	ree	7
_	OA - Olloligiy Agree	A - Agree	NS - Not Sure	D - Diaugico		-	9.1	g	-	_
	I often have the feeling	that I cannot han	dle things very well			SA	Α	NS	D	SE
	I find myself giving up expected					SA	Α	NS	D	SE
	I feel trapped by my re					SA	A	NS	D	SE
	Since having this child					SA	A	NS	D	SI
	Since having this child, I					SA	A	NS	D	SI
	I am unhappy with the					SA	A	NS	D	SI
	There are quite a few t					SA	A	NS	D	SI
	Having a child has cau					SA	^	NO	U	OL
	my spouse/parenting					SA	Α	NS	D	SI
2	I feel alone and withou	Control of the Contro				SA	A	NS	D	SI
	When I go to a party, I					SA	Α	NS	D	S
	I am not as interested		SA	A	NS	D	S			
	I don't enjoy things as	SA	A	NS	D	S				
	My child rarely does t	hings for me that i	make me feel good.			SA	Α	NS	D	S
١.		my child, I get the	feeling that my effor	ts are not apprecia	ted					
	very much					SA	Α	NS	D	S
	My child smiles at me					SA	Α	NS	D	S
	Sometimes I feel my cl					SA	Α	NS	D	S
	My child is very emot					SA	Α	NS	D	S
	My child doesn't seem					SA	Α	NS	D	S
	My child doesn't seem					SA	Α	NS	D	S
	My child is not able to					SA	Α	NS	D	S
,	It takes a long time an	d it is very hard fo	or my child to get us	ed to new things.		SA	Α	NS	D	S
	I feel that I am: (Choos					1	2	3	4	
		very good parent.								
		better-than-averag	ge parent.							
	5. ar	n average parent. nerson who has so	ome trouble being a	parant						
		ot very good at be		parent.						
3.	I expected to have clos bothers me	ser and warmer fe	elings for my child t	han I do, and this		0.4		NC	0	S
	Control					SA	A	NS	-	-

5	A = Strongly Agree	A = Agree	NS = Not Sure	D = Disagree	SD =	Stron	gly	Disag	ree	
5. My	child seems to cry o	r fuss more ofter	than most children.			SA	Α	NS	D	SD
	child generally wak					SA	Α	NS	D	SD
	el that my child is ve					SA	Α	NS	D	SD
. Co	mpared to the averaged to changes in sche	ge child, my child	has a great deal of	difficulty in getting		SA	Α	NS	D	SD
	child reacts very str					SA	Α	NS	D	SD
Wh	nen playing, my chilo	l doesn't often gi	ggle or laugh			SA	Α	NS	D	SD
	child's sleeping or e				cted.	SA	Α	NS	D	SD
. I ha	ave found that gettin noose a response fron 1. mu	g my child to do n the choices belo ch harder than I o	ow.)	oing something is:		1	2	3	4	5
	 abo son 	newhat harder th ut as hard as I ex newhat easier tha ch easier than I e	pected. n I expected.							
For	nk carefully and cou example, dawdles, r oose a response fron	efuses to listen, o	veractive, cries, inte	rrupts, fights, whin	es, etc.	1	2	3	4	5
	1. 1-3 2. 4-5 3. 6-7 4. 8-9									
	5. 10+									
	e are some things m					SA	Α	NS	D	SD
	child's behavior is m					SA	Α	NS	D	SD
My c	hild makes more de	mands on me tha	an most children			SA	Α	NS	D	SD

The Parenting Stress Index: Short Form – AR (PSI – SF:AR)

يحتوي هذا الاستبيان على 36 عبارة اقرأ كل عبارة بتمعن ومن ثم اختر الإجابة التي تعبر عن رأيك. في حالة لم تجد العبارة التي تعبر عن رأيك اختر أقرب عبارة ممكن ان تتفق مع مشاعرك. ولتكن اجابتك هي ردة فعلك الأولى لكل عبارة.

لا اوافق	Z	¥	أوافق	أوافق	العبارات	
بشدة	أوافق	أدري		بشدة		
					اشعر في احيان كثيرة باني غيرقادر على معالجة الأموربشكل جيداً.	1
					اجد انني اضحي بجزء من حياتي أكثر مما توقعت من اجل تلبية	2
					طلبات اطفالي.	
					أشعر كأني سجين مسئولياتي كأب او كأم.	3
					منذ ميلاد هذا الطفل، لم اتمكن من عمل أشياء جديدة ومختلفة.	4
					منذ ميلاد هذا الطفل اشعر بأني قد اكون دائماً غير قادر على عمل	5
					الأشياء التي احب عملها.	
					أنا غير راضي عن آخر قطعة ملابس اشتريتها لنفسي.	6
					المنغصات التي تضايقني في حياتي كثيرة الى حداً ما.	7
					سبّب وجود الطفل مشاكل أكثر مما كنت أتوقع في علاقتي مع شريك	8
					حياتي.	
					أشعر بالوحدة وبأني بلا أصدقاء.	9
					عندما أذهب الى مناسبة فأني عادة ما اتوقع الا استمتع بها.	10
					لم أعد أهتم بالناس بقدر ماكنت أفعل سابقاً.	11
					لا استمتع بالأشياء مثلما اعتدت سابقاً.	12
					تصرفات طفلي نادرا ما تشعرني بالأرتياح.	13
					اشعر في معظم الأحيان أن طفلي لا يحبني ولا يريد أن يضل بجانبي.	14
					يبتسم لي طفلي أقل بكثير مما كنت أتوقع.	15
					عندما أقوم بعمل ما لطفلي أشعر أنه لا يقدر جهودي حق قدر ها.	16
					عندما يلعب طفلي فهو لايكثر من القهقة والضحك.	17
					لا يبدو على طفلي أنه يتعلم بنفس السرعة التي يتعلم بها معظم	18
					الأطفال.	
					لايبدو أن طفلي يبتسم بنفس القدر الذي يبتسم به معظم الأطفال.	19
					لايقدر طفلي على أداء ماكنت أتوقع منه ان يؤديه بقدر توقعاتي.	20
					من الصعب جداً أن يتعود طفلي على الأشياء الجديدة ويستغرق منه	21
					ذلك وقتاً طويلاً.	

للإجابة على العبارة التالية اختر اجابة واحدة من بين الأختيارات التالية:

22- اشعر أننى:

1. لست مؤهل أو قادر لكي أكون اباً أو أماً

2 أنني اعاني نوعاً ما لكوني أب أو أما

3.أب أو أم عادي

4.أب أو أم أفضل من الأباء والأمهات الأخرين

5.أب أو أم صالحاً جداً.

لا اوافق	Z	Z	أوافق	أوافق	المعبارات	
بشدة	أوافق	أدري		بشدة		
					لقد توقعت ان احظى بمشاعر دفء وتقارب بيني وبين طفلي اكثر	23
					مما تحقق لي معه فعلاً و هذا يضايقني.	
					في بعض الأحيان يقوم طفلي - لمجرد ان يكون لئيماً - ببعض	24
					النصرفات التي تضايقني .	
					يبدو أن طفلي يبكي أو يسبب أز عاجا أكثر من معظم الأطفال	25
					يستيقظ طفلي بمزاج سيء عموماً.	26
					اشعر بأن طفلي متقلب المزاج جداً ومن السهل استثارة غضبه.	27
					يقوم طفلي بعمل بعض الأشياء التي تضايقني.	28
					ردة فعل طفلي تكون قوية جداً عندما يحدث شيء لا يحبه.	29
					يضطرب طفلي بسهولة لأتفه الأسباب.	30
					تنظيم مواعيد نوم طفلي وأكله أصعب مما كنت أتوقع	31

للإجابة على العبارة التالية اختر اجابة واحدة من بين الأختيارات التالية:

32- لقد اكتشفت أنه من أجل ان يفعل طفلي شيئاً ما أو يتوقف عن فعله هو أمر:

1.أصعب بكثير مما كنت أتوقع

2.أصعب مما كنت أتوقع الى حداً ما

3 كما توقعت تماماً من حيث درجة الصعوبة

4. أسهل مما كنت أتوقع الى حداما.

5.أسهل مما كنت أتوقع بكثير.

33- فكر ملياً ومن ثم حدد عدد الأشياء التي تضايقك عندما يقوم بها طفلك. على سبيل المثال (يبكي ، يفرط في النشاط ، يرفض الاستماع ، يتباطأ، يقاطع المتحدثين ، ينوح، يتشاجر مع الأخرين).

1. اكثر من 10

2.من 8 الى 9

3.من 6 الى 7

4.من 4 الى 5

5.من 1 الى 3

لا اوافق	Z	¥	أوافق	أوافق	العبارات	
بشدة	أوافق	أدري		بشدة		
					بعض أفعال طفلي تضايقني فعلاً.	34
					أتضح لي ان طفلي أصبح يمثل لي مشكلة اكثر مما كنت أتوقع.	35
					يتطلب طفلي رعاية أكثر مما يتطلبه معظم الأطفال الأخرين.	36

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