

Detecting burnout: Identifying key symptoms using standard and machine learning methods.

Tavella, Gabriela; Spoelma, Michael; Parker, Gordon

Individuals readily self-diagnose as experiencing burnout despite continuing debate among researchers and practitioners regarding how the syndrome should best be defined and measured. The objective of this study was to determine whether a new 34-item measure of burnout distinguished those who did and did not self-identify as burnt out and in doing so ascertain the most distinguishing symptoms. Six hundred twenty-five participants recruited via Facebook completed the burnout measure online before reporting whether they were currently experiencing burnout. Receiver operating characteristic analyses indicated that the measure adequately discriminated between those who did (47.7%) and did not self-report burnout. Cutoff scores based on Youden's indices had comparable classificatory accuracy as prediction rule ensembles derived through machine learning methods. Items capturing exhaustion, compromised cognition, lack of pleasure in work, and self-criticism were the most distinguishing items across the analyses, while items depicting empathy loss varied in their discriminatory capacity between analyses. Weighting symptom items according to their discriminatory capacity did not improve classificatory accuracy compared to when all items were weighted equally. Overall, the 34-item measure satisfactorily differentiated those with and without self-reported burnout, with symptoms of exhaustion, cognitive dysfunction, lack of pleasure in work, and self-criticism being most indicative of the syndrome. Future research is needed to validate the measure and its cutoff values by comparing measure scores against those clinically judged as having burnout.

Keywords: Machine Learning, Burnout, Syndrome.

INTRODUCTION

The United States (U.S.) continues to grow increasingly diverse, and it has been estimated that over one-third of the U.S. population is now made up of culturally and linguistically diverse (CLD) groups. Between 2010 and 2020, diverse groups became a majority population in many states, including Hawaii, the District of Columbia, California, Texas, and New Mexico (U. S. Census Bureau 2021). Among CLD groups, the Asian population has risen by nearly 36%

over the past decade, and Asians are the fastest growing racial group in the country, making up about 6% of the population in 2020 (Jones et al. 2021).

When youth with disabilities are transitioning into adulthood, parents can and should play a critical role in their children's lives as collaborators, decision makers, evaluators, role models, trainers, mentors, instructors, and system change agents, in both schools and adult service agencies (Fullarton and Duquette 2015). Moreover, research has identified that family involvement is key to successful postschool transition for young adults with disabilities (Fullarton and Duquette 2015; Sanderson and Bumble 2023; Wehman et al. 2015). Although active parental involvement appears to make a significant difference in the postschool outcomes of students with disabilities, recent studies have consistently indicated that many parents continue to play a passive role in planning and decision making irrespective of their high rate of attendance at meetings (Francis et al. 2018; Hirano et al. 2016). Furthermore, research has shown that Asian American parents are more passive and less informed when engaging in transition planning meetings (Kim and Kim 2017; Kim et al. 2007; Lo and Bui 2020) and feel significantly less involved than their European American counterparts (Geenen et al. 2001). In addition, these parents have been found to offer significantly fewer suggestions at IEP meetings and know significantly less about available services for their children than European American parents (Geenen et al. 2001; Kim et al. 2007; Lo and Bui 2020). Therefore, CLD parent involvement should be rigorously addressed when developing strategies to increase active family support and involvement as consistent predictors of the postsecondary employment and community living status of young adults with disabilities (Francis et al. 2018; Wehman et al. 2015).

Over the past decade, there has been an increasing number of studies on CLD youths with disabilities and parental involvement in, expectations of, and experiences with transition-related activities (Francis et al. 2018; Hirano et al. 2016). To date, however, most studies regarding the move into adulthood have focused on Black, Hispanic, and Native American adolescents with disabilities and their parents, and much less research has been conducted on the perspectives of Asian American adolescents with disabilities and their families (Dababnah et al. 2022). Thus, in the realm of adolescents with disabilities and their families, Asian Americans remain one of the most poorly understood ethnic minorities despite the fact that they are among the fastest growing groups (Lo and Bui 2020; Trainor et al. 2014).

Since the Asian American population is extremely diverse within and between sub-groups of the total population (Budiman and Ruiz 2021), it is critical to investigate Asian subcultures to meet the individual needs of Asian American adolescents with disabilities and their families. Based on the assumption that the definition of successful adulthood and perceptions of disability differ from culture to culture, interactions between youth with disabilities and their family members

have been a focus of transition research, particularly in studies that have examined the transition experiences of CLD youths with disabilities (Francis et al. 2018; Gothberg et al. 2018; Lo and Bui 2020; Thoma et al. 2016). Therefore, to better understand how Korean American youth with disabilities go through transitions and how education and services can more effectively target them, this qualitative study was designed to investigate the experiences of parents of Korean American young adults with disabilities related to the transition from school into adulthood. To achieve the purpose of the study, the research question is as follows:

What do parents of Korean American young adults with disabilities perceive regarding experiences related to their child's transition from high school into adulthood?

METHOD

In this study, a generic qualitative design was used to facilitate understanding and explain the meaning of the social phenomena of interest from the participants' perspectives (Merriam and Tisdell 2015). Qualitative research typically engages a relatively small number of individuals and preserves their unique perspectives, rather than collecting data from large samples and aggregating the data across populations (Seidman 2019). By implementing a qualitative design, we were able to understand how the participants' perspectives were shaped by the unique circumstances in which they occurred.

PARTICIPANTS

To achieve the purposes of the research, a purposive and snowball sampling method was used to select participants. The criteria the researchers established for selecting target participants included parents of Korean American young adults who: (a) have documented disabilities and qualified for transition services under the Individuals with Disabilities Education Improvement Act; (b) are either immigrants from Korea or born in the United States; and (c) are between 18 and 25 years old. The researchers sought nominations of parents of Korean American young adults with disabilities from a Korean American disability organization, a non-profit organization for multicultural families, and a Korean American parents self-help group leader who a friend of the first author knows through a Korean church in Orange County, California. We asked them to share the recruitment materials with families and organizations who may be serving these populations.

Nine mothers¹ of Korean young adults with disabilities aged 18–25 agreed to participate in interviewing with the first researcher. Two mothers were from California (CA), and one was from Texas (TX); the rest were from Washington (WA). Once identified, the participants received a personalized invitation via

email (either from the researchers directly or through the organization and/or the leader), including information about the study and its importance, incentives, an assurance of confidentiality, and a direct link to an informed consent website as an expression of their willingness to participate in the study.

The 9 mothers’ demographic information is shown in Table 1. All the participants have been resident more than 10 years. All the mothers were born in South Korea. Half of the mothers considered their spoken English poor, while the rest thought they were okay in communicating using English.

Table 1. Participant’s demographic information.

#	Age	Living Years	Income	Place
1	55	13	USD 25,001~50,000	WA
2	54	39	USD 25,001~50,000	WA
3	56	20	USD 75,001~	WA
4	44	18	~USD 25,000	WA
5	48	10	USD 25,001~50,000	WA
6	55	11	USD 25,001~50,000	WA
7	54	24	USD 75,001~	CA
8	53	15	USD 50,001~70,000	CA
9	55	13	USD 25,001~50,000	TX

#	Child’s Name (Pseudonym)	Gender	Age	Born Country	Type of Disability
1	Kelly	Female	23	South Korea	mild intellectual disability
2	Mike	Male	21	USA	autism
3	Kelvin	Male	19	South Korea	Asperger
4	Grace	Female	18	USA	Asperger
5	David	Male	19	South Korea	down syndrome
6	Tom	Male	21	South Korea	autism
7	James	Male	23	USA	autism
8	Emma	Female	24	South Korea	multiple disability
9	Sue	Female	25	South Korea	down syndrome

Of the nine mothers’ children, three had spent more than 21 h per week in special classrooms in high school and four had stayed less than 5 h, while two spent between 6 and 21 h per week. Four were female and five were male. All of them had both Korean and English names. For the purpose of confidentiality, the authors used English pseudonyms for each youth even though the participants mentioned their child’s Korean name throughout the interviews.

DATA COLLECTION

The data were collected through in-depth, semi-structured interviews with 9 mothers of Korean American young adults with disabilities in Korean. Interviews were conducted by the first author who can speak both English and Korean

fluently and has a doctoral degree obtained from a university in the United States in special education, specializing in secondary transition education. An open-ended interview protocol was used to collect the data. This interview protocol was developed to gain information regarding the perceptions of parents of Korean American young adults with disabilities on moving from high school into adulthood. The interview began with broad, open-ended questions that focused on obtaining the participants' perceptions and experiences related to school transition experiences for their child with disabilities (see Table 2).

Table 2. Interview protocol.

-	Describe how the school has prepared your child for life after high school.
-	Please tell me how helpful this help was.
-	Please tell me about your involvement in this process. Please let me know if you had any difficulties or found anything helpful during this process.
-	Please tell me about the level of satisfaction (school programs, teachers, related services, etc.).
-	Where did you get information about special education and transition to adulthood when you were in high school?

Initially, in order to recruit potential participants, the first author contacted the Korean American disability organization, a non-profit organization for multicultural families, and the Korean American parents self-help group leader to explain the purpose and procedures of the study and allow them to ask questions and raise any concerns they might have about the study. After this process, interview appointments were set up to accommodate the schedules of the participants who were interested in the interviews. Except for one mother who lives in TX, all participant mothers were interviewed in person. The mother in TX was interviewed via a smartphone. All the interviews were recorded using a smartphone and then transcribed verbatim.

DATA ANALYSIS

A constant comparison method was used to analyze the data. This involved the simultaneous coding of raw data and the construction of categories that captured relevant characteristics of the document's content (Merriam and Tisdell 2015). The first author, who interviewed the mothers, transcribed the interviews in Korean and subsequently asked the second author, who had obtained a doctoral degree in special education in the United States, to proofread the transcripts while listening to the corresponding audio file to ensure that the files had been transcribed correctly. Then, the authors read all transcripts, marking all relevant passages in terms of the research questions and emergent themes and subthemes. The authors then sorted the coded data into categories and subcategories

simultaneously establishing categorization rules through discussion and reached unanimous agreement.

To combat threats to validity, a peer debriefing was used for the research. Specifically, to avoid threats to a valid description of the issues due to inaccuracy or incompleteness of the data, the first author recorded the interviews with smartphones and then transcribed them verbatim within 24 h to ensure clear understanding and accuracy. The second author rechecked the transcripts against the audio files from all the participants. The two authors discussed all codes, categories, and themes throughout the content analysis procedures and reached a consensus on the data. Next, a peer debriefer was employed for this study (Merriam and Tisdell 2015). The peer debriefer was a research faculty member who had obtained a doctoral degree in the United States with a major in special education and secondary transition education. After the authors reached a consensus on the data codes and categories, they conferred with the debriefer to determine if the identified codes were accurate reflections of the transcript data. This was accomplished by sharing the original transcripts and identified codes with the debriefer to confirm the accuracy and validity of the codes and categories that emerged from the data.

RESULTS

Overall, the qualitative analysis revealed five themes: Importance and shortcomings of transition programs for students with disabilities aged 18–21, use of an ethnic informal organization, mothers' readiness for the future, professionals' negative attitudes, and transition planning.

Importance and Shortcomings of Transition Programs for Students with Disabilities Aged 18–21

Six Korean American young adults who were attending or had attended transition programs for 18–21-year-old students with disabilities were included. The transition programs are designed for young adults with disabilities aged 18–21/22 who continue to need special education services to prepare them for meaningful work and community experiences.

Three of the six participants thought that the transition program was essential as an outlet to find a job. They mentioned that their child prepared for the move into adulthood through the transition program, not through high school.

“The program motivated Mike to work. The program offers a variety of job sites and teaches him how to work at each site. He wants to work now. I feel relieved to see that he got a job before the program is over. Seeing him have a successful job interview gave me more hope for him. He is doing better than I thought”. (Respondent #2)

These parents wanted to extend the transition programs by up to five years after completing a high school program because they felt that their child did not have enough time to find a job during the transition program. They were concerned that the case manager (or job coach) service would be terminated if their children were not employed within the transition program period.

Another three participants pointed out that the transition program was oriented more toward people with severe disabilities and hence the skills taught in the transition program were too simplistic. These mothers considered their child's function and ability to be better than the skills taught in the transition programs. One mother said:

“My daughter received vocational training. But they (young adults with disabilities) only do simple things like folding clothes . . . they (professionals) have to reflect the characteristics of each young adult with disabilities and train them accordingly . . . Some kids are a little more capable and others are not . . . but, they make each of them do the same thing . . .” (Respondent #7)

Also, one of the Korean American mothers questioned whether some staff took the labors of students with disabilities in the transition program for granted, and whether some of the vocational skills really needed to be taught.

“Under the name of the transition program, our children do very monotonous jobs, such as washing dishes and cleaning tables, and their works are for free. One day, I was told that they were pulling weeds under the sun. Such skills can be acquired without being taught. Sometimes, I wonder if training is necessary to do such a thing”. (Respondent #1)

Use of an Ethnic Informal Organization

All the participants except one in TX were connected to an ethnic informal organization to some extent. The two Korean American mothers in CA had their children engaged in recreation services such as playing basketball with peers without disabilities at the Korean American non-profit organization, while the mothers in WA received various transition services in the multicultural family non-profit organization. Parents' choices were limited to the availability of the services in an informal ethnic organization. For instance, the Korean American non-profit organization in CA focuses primarily on the services related to early childhood identification and therapy, while the multicultural family non-profit organization in WA provides services for all ages with disabilities, especially transition-aged individuals with disabilities. The participants who used the services of the multicultural family non-profit organization in WA noted that the organization offered very useful information to help their child move from school to adulthood, while the mothers in CA did not mention using an organization as a facilitator for their child's successful transition to adulthood. The mothers in WA hoped that such organizations would be more available in the future.

“Before I got to know this organization, I heard that there are services for people with disabilities like my child in the United States. However, I did not know how to access these services. So, I asked several Korean mothers who had received the disability services for their children and the social worker who helps the elderly; but I got answers from them, either that they did not remember how they had approached the services or that the Korean social worker did not know about certain services provided for youth with disabilities. Almost giving up, I found an advertisement about the organization in a Korean newspaper and contacted Ms. Yang (a Korean staff). Previously, I was blind about the information in this area. Now, I think I am better equipped with the information”. (Respondent #2)

“High school gives me the whole information that I am hardly able to follow, which is like teaching me how to cook rice in words. However, the organization gives me the information by breaking it down into steps that I can follow, which it is like feeding me with the cooked rice. I consider myself lucky to have found this organization”. (Respondent #5)

The Korean American mothers in WA pointed out two reasons for using this organization: one was to acquire information on adult transition services and the other was because the organization had Korean staff. These parents emphasized that the competence of the Korean staff was vital, saying that:

“There are many programs in the United States. Not all American parents of a child with disabilities are familiar with disability services and benefits. Some American parents do not receive the services and benefits. Korean parents do not speak English very well, and even if they know English, they don't know much about the programs and services related to disability. The organization (Korean staff) provides us helpful disability information in Korean and sometimes helps with paperwork”. (Respondent #2)

Mothers' Readiness for the Future

Among the participants in this study, there was a difference in the mothers' readiness for their children's future when they were in high school. Three participants had definite goals for their children's future, while another three mothers had vague plans. The mothers with definite goals for their children's future considered employment as the most important outcome of education and planted this idea in their children's hearts during high school.

“I believe that getting a job is not an option for children with disabilities. No matter how good special education and related services they receive in high school, their education is in vain if it does not lead to employment. Today, people with disabilities live over 80 years of age. When they turn 21, they should be out of school. They need something to do for the rest of their lives. Whenever I have time with him, I stress that he has to work after school”. (Respondent #2)

These parents also commented on the importance of parental awareness of their child's disability and emphasized that they must believe their child can work even if their child's disability is severe.

"Many Korean parents I know are already giving up on their children's future. They question what their children can do. Even though I tell them about the transition program, they think that their children's disability is so severe that they cannot work. Such a thought prevents them from doing anything for their children. There really isn't a job to go for later because their kids get older and less capable. These kind of parents feels pity for themselves and their lives, complaining that their children have to stay at home, and they have to look after their children endlessly. They should think that such a result is because of their wrong thinking". (Respondent #1)

Another three participants hoped that their children would have a meaningful job that they could enjoy. However, they had vague goals regarding the kind of job their child might want. These mothers reported that they had not thought specifically about their child's future during high school, either because they thought their child was too young to procure a job or because they were busy making a living. One parent, James' mother, who thought James was too young to get a job, hoped that he could engage in job training around the age of 23 or 24. Although he had already graduated from high school, she could not visualize him working and living independently. The two remaining participants did not have time to consider their children's adult future because they were busy working.

"If she gets a job, we should give her a ride. But we don't have time to do it. We have to work to live. So, we didn't weigh what she learned in her school and what she will do for her future". (Respondent #9)

Professionals' Negative Attitudes

Three Korean American parents were outraged that professionals were unresponsive to their suggestions or opinions about their children's education, especially when their children were in high school. For example, Grace's mom wanted her to receive more functional curriculum rather than academic curriculum.

"Grace spent high school in a regular classroom. During her three years of high school, she learned things that did not help, like calculating complex fractions. She graduated with a good GPA because she took the open book test. She never learned anything practical for her adult life. I'd asked them several times to teach her practical skills such as counting money or paying in the store. They said yes. However, it never changed". (Respondent #4)

Also, this mother was deeply upset about teachers' lack of reflection on her request to change her child's job sites in the transition program and was told that she would have to wait for three months from the time of the request for change.

“She is very sensitive to chemicals and hates all smells, including strong chemicals. She dislikes washing dishes in a kitchen full of chemical smells. One day, she developed an allergic reaction after working at a greenhouse. After doing such activities in the program, she usually takes a bath for an hour. Because we understand that it’s part of the program, we have seen her stressed out for six months. Finally, we asked them to find a workplace considering her preferences, such as filing papers or sorting clothes at Goodwill. They said yes; but we are still waiting for our request to be answered”. (Respondent #4)

Transition Planning: Not for a Future Plan but for a Legal Obligation

Most participants in this study said that transition planning did not help prepare their children for adulthood. These parents said that instead of setting a postschool goal through transition planning, they were asked to choose a goal: either employment or higher education. When the parents were hesitant about choosing a career path for their children, they were often referred to a transition program for their children. One mother’s comments reflected that transition planning was an exit activity rather than an ongoing planning process.

“We were uncertain about his future. Teachers recommended for James to take a transition program at his senior IEP meeting, and we refused their suggestion . . . He graduated from high school without being connected to an adult agency . . . There was not a specific future plan for him. As soon as he got a high school diploma, I had to do everything for him by myself”. (Respondent #7)

Two Korean American mothers mentioned that they had no precise conception of what transition planning was for and what it was about. For example, Emma’s mother noted that “I did not know what an IEP meeting was. When school asked me to come for the meeting, I just went. I did not think what the meeting would do it for my child”.

Additionally, she mentioned that she could not understand the meanings of some goals and terminologies in the IEP. Although a Korean interpreter was arranged for the IEP meeting, she noted that they did not help her to understand what was going on during the IEP meeting or answer her questions after the meeting, because the interpreter was just a bilingual person without background knowledge of special education.

DISCUSSION

The perspectives of the mothers in this study are not intended to be representative of all Korean American mothers who have young adults with disabilities making the transition into adulthood. Specifically, the qualitative data from these 9 mothers can be considered an initial study designed to gain an understanding of the particularly unique perspectives of this growing section of

the US school population. As is the case with qualitative research, the main purpose is not to generalize the findings, but to offer an in-depth description of a unique set of issues and perspectives. However, the rich description of these mothers' transition experiences for their children does provide an important indication of how Korean American mothers are likely to envision their children's future, and the critical barriers and supports during transition.

Regarding the transition experiences, this study found that Korean American parents were highly associated with informal ethnic support groups. This finding confirmed that informal support organizations are one of the most frequently cited resources by CLD parents accessing information about transition services (Francis et al. 2018; Kim et al. 2007; Lo and Bui 2020). In this study, most Korean American parents were vaguely aware that there are some adult transition services available for people with disabilities in the US system. However, they did not know exactly what these services were and how to access them because of their limited English proficiency and lack of understanding of the system, which led them to rely on informal Korean support groups or a non-profit organization with a Korean staff member. Additionally, this study revealed that not all the Korean American participants appeared to receive adequate information on transition services from the informal ethnic support organizations they used. Depending on the services provided by the informal ethnic support organizations near their place of residence, the parents could not meet their needs or access information they wanted. Therefore, educators need to ensure that Korean American parents can truly understand and utilize the information related to transition education and related services. Whenever possible, educators should share resources (e.g., a list of various multicultural support groups with Korean staff, parents with children who can provide a model of successful transition, or Korean graduate students studying special education) with Korean American parents who lack social resources.

In this study, some Korean American mothers appeared not to be ready for their children's future, believing that their children were too young to work or live independently. Mainstream cultural values regarding adulthood are associated with independence, autonomy, and physical and emotional separation from parents (Kirby et al. 2020). However, many Asian American and Hispanic students with disabilities and their families have differing values regarding where and when to move out of the family home and live independently (Francis et al. 2018; Lo and Bui 2020). They may not feel it is urgent to prepare their children with disabilities for adulthood. Although transition planning usually starts at the age of 16 or earlier, parents may fall behind in thinking about their children's future at that age. Therefore, educators need to help Korean American parents develop a set of expectations related to employment, postsecondary education, community integration, and independence early in their children's life. It is also important that educators share with Korean American parents a transition scope

and sequence so that they can systematically prepare for their children's transition to adulthood.

Transitioning is a process that requires a collaborative approach involving students with disabilities, their parents, teachers, and adult service providers. The role of professionals is paramount to achieving successful outcomes for CLD students with disabilities and ensuring participation among CLD parents (Lo and Bui 2020). Our findings indicated that most participants reported negative attitudes from professionals during the transition process, such as unresponsiveness to and a lack of support for the preferences and interests of students with disabilities and their parents. Although the research makes it clear that parents' active engagement is important for the postschool outcomes of students with disabilities (Wehman et al. 2015), the negative and unhelpful attitudes of professionals were still barriers to Korean American parents' active involvement in formal planning for their children's future. These barriers can lead these parents to play a passive role in the transition process and become dissatisfied with the support received from schools (Francis et al. 2018; Lo and Bui 2020). Such a lack of collaboration between professionals and Korean American parents might influence the postschool outcomes of Korean American students with disabilities. Considering that the research shows that preservice and in-service teachers have little or no knowledge of CLD practices (Gothberg et al. 2018), special education preservice and in-service training need to pay close attention to improving the recommended evidence-based practices for supporting CLD students with disabilities and their parents during transition.

The transition planning required by the Individuals with Disabilities Education Act (IDEA) for students with disabilities is designed to help the students become ready for adult life. The participants in the study felt that transition planning was similar to paperwork, and some of them were unaware of what transition planning entails. This study bolstered the findings of several studies related to CLD parents' perceptions of transition planning; that is, CLD parents thought it was not helpful in preparing their child for the future and were unfamiliar with transition planning or had limited knowledge of transition services (Francis et al. 2018; Ju et al. 2018; Lo and Bui 2020). Research indicates that transition planning is closely associated with successful postschool outcomes (Newman et al. 2016; Trainor et al. 2016). Considering that CLD students with disabilities had poor postschool outcomes (Newman et al. 2011), it is important for professionals to ensure that CLD parents, including Korean American parents, understand the importance of transition planning by developing better strategies to help the parents obtain knowledge and skills that will allow them to participate in transition planning. Professionals should make sure that Korean American parents are aware of their role as an important source of support and resources for their children by providing important information on their child's preferences and interests to help them to pursue their child's postschool goals. Also, professionals

should seek ways to enhance effective communication and collaboration between school and parents, including language support (Ju et al. 2018).

Some limitations of the study should be recognized. First, because this study used the convenience sampling method, the perspectives of the Korean American parents in this study may not accurately reflect the experiences of other Korean American parents of young adults with disabilities aged 18–25. Nearly half of the participants were identified by contacting informal family support organizations in large urban areas of the US. Thus, the mothers belonging to such organizations may have different views from Korean immigrant mothers who do not belong to such organizations. Second, due to the great difficulties in locating potential participants, we were not able to evenly recruit participants based on specific demographic characteristics, such as socioeconomic status, English proficiency, and place of residence.

Despite the limitations of the study, the qualitative data from these 9 parents can be considered part of an initial study designed to understand the particularly unique perspective of this growing U.S. school population. The rich descriptions of the parents' transition experiences for their children provide an important indication of how Korean American parents are likely to envision their children's future, and the critical barriers and support during this transition.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

- Budiman, Abby, and Neil G. Ruiz. 2021. Key Facts about Asian Americans, a Diverse and Growing Population. Pew Research Center, April 29. Available online: <https://www.pewresearch.org/short-reads/2021/04/29/key-facts-about-asian-americans/> (accessed on 29 August 2023).
- Dababnah, Sarah, Irang Kim, Yao Wang, and Charina Reyes. 2022. Brief report: Impact of the COVID-19 pandemic on Asian American Families with children with developmental disabilities. *Journal of Developmental and Physical Disabilities* 34: 491–504. [CrossRef] [PubMed]
- Francis, Grace L., Judith M. Gross, Carlos E. Lavín, Lu Ankely Casarez Velazquez, and Nicholas Sheets. 2018. Hispanic caregiver experiences supporting positive postschool outcomes for young adults with disabilities. *Intellectual and Developmental Disabilities* 56: 337–53. [CrossRef] [PubMed]
- Fullarton, Stephanie, and Cheryll Duquette. 2015. The transition process for adolescents with learning disabilities: Perspectives of five families. *Exceptionality Education International* 25: 84–106. [CrossRef]
- Geenen, Sarah, Laurie E. Powers, and Alfonso Lopez-Vasquez. 2001. Multicultural aspects of parent involvement in transition planning. *Exceptional Children* 67: 265–82. [CrossRef]
- Gothberg, June E., Gary Greene, and Paula D. Kohler. 2018. District implementation of research-based practices for transition planning with culturally and linguistically diverse youth with disabilities and their families. *Career Development and Transition for Exceptional Individuals* 56: 307–20. [CrossRef]

- Hirano, Kara A., S. Andrew Garbacz, Lina Shanley, and Dawn A. Rowe. 2016. Parent involvement in secondary special education and transition: An exploratory psychometric study. *Journal of Child and Family Studies* 25: 3537–53. [CrossRef]
- Jones, N., Rachel Marks, Roberto Ramirez, and Merarys Rios-Vargas. 2021. 2020 Census Illuminates Racial and Ethnic Composition of the Country; United States Census Bureau, August 12. Available online: <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html> (accessed on 29 August 2023).
- Ju, Song, Leena Jo Landmark, and Dalun Zhang. 2018. Culturally and linguistically diverse family involvement in transition planning: A research synthesis. *Journal of Special Education Leadership* 31: 16–26.
- Kim, Jieun, and Sunyoung Kim. 2017. Positioning of Korean immigrant mothers of children with disabilities. *International Journal of Multicultural Education* 19: 41–64. [CrossRef]
- Kim, Kyeong-Hwa, Youngsun Lee, and Mary E. Morningstar. 2007. An unheard voice: Korean American parents' expectations, hopes, and experiences concerning their adolescent child's future. *Research and Practice for Persons with Severe Disabilities* 32: 253–64. [CrossRef]
- Kirby, Anne V., Laura Graham Holmes, and Andrew C. Persch. 2020. Longitudinal change in parent postsecondary expectations for youth with disabilities. *Disability and Rehabilitation* 43: 2829–37. [CrossRef] [PubMed]
- Lo, Lusa, and Oanh Bui. 2020. Transition Planning: Voices of Chinese and Vietnamese Parents of Youth with Autism and Intellectual Disabilities. *Journal of Career Development and Transition for Exceptional Individuals* 43: 89–100. [CrossRef]
- Merriam, Sharan B., and Elizabeth J. Tisdell. 2015. *Qualitative Research: A Guide to Design and Implementation*, 4th ed. San Francisco: Jossey-Bass.
- Newman, Lynn A., Joseph W. Madaus, and Harold S. Javitz. 2016. Effect of transition planning on postsecondary support receipt by students with disabilities. *Exceptional Children* 82: 497–514. [CrossRef]
- Newman, Lynn, Mary Wagner, Anne-Marie Knokey, Camille Marder, Katherine Nagle, Debra Shaver, Xin Wei, Renee Cameto, Elidia Contreras, Kate Ferguson, and et al. 2011. *The Post-High School Outcomes of Young Adults with Disabilities Up to 8 Years after High School; A Report from the National Longitudinal Transition Study-2 (NLTS2) (NCSE 2011-3005)*. Menlo Park: SRI International. Available online: <https://ies.ed.gov/ncser/pubs/20113005/pdf/20113005.pdf> (accessed on 9 March 2021).
- Sanderson, Kelli A., and Jennifer L. Bumble. 2023. Parent perspectives: Understanding the postschool concerns of parents of transition-age youth with disabilities. *Journal of Career Development and Transition for Exceptional Individuals* 46: 120–32. [CrossRef]
- Seidman, Irving. 2019. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*, 5th ed. New York: Teacher College Press.
- Thoma, Colleen A., Martin Agran, and LaRon A. Scott. 2016. Transition to adult life for students who are black and have disabilities: What do we know and what do we need to know? *Journal of Vocational Rehabilitation* 45: 149–58. [CrossRef]
- Trainor, Audrey A., A. Murray, and H. Kim. 2014. Postsecondary Transition and English Language Learners with Disabilities: Data from the Second National Longitudinal Transition Study. WCER Working Paper No. 2014-4. Available online: https://wcer.wisc.edu/docs/working-papers/Working_Paper_No_2014_04.pdf (accessed on 29 August 2023).
- Trainor, Audrey A., Mary E. Morningstar, and Angela Murray. 2016. Characteristics of transition planning and services for students with high-incidence disabilities. *Learning Disability Quarterly* 39: 113–24. [CrossRef]
- U. S. Census Bureau. 2021. *Race and Ethnicity in the United States: 2010 Census and 2020 Census*. Shortland: United States Census Bureau, August 12. Available online:

<https://www.census.gov/library/visualizations/interactive/race-and-ethnicity-in-the-united-state-2010-and-2020-census.html> (accessed on 29 August 2023).

Wehman, Paul, Adam P. Sima, Jessica Ketchum, Michael D. West, Fong Chan, and Richard Luecking. 2015. Predictors of successful transition from school to employment for youth with disabilities. *Journal of Occupational Rehabilitation* 25: 323–34. [CrossRef] [PubMed]