Intellectual and Developmental Disabilities

Transition Planning: Knowledge and Preferences of Latinx Families of Youth With Intellectual and Developmental Disabilities --Manuscript Draft--

Manuscript Number:	IDD-D-21-00033R3		
Article Type:	Research		
Keywords:	transition planning; Latinx; parents; Special education; services		
Corresponding Author:	Janeth Aleman-Tovar, M.A. University of Illinois at Urbana-Champaign Urbana, Illinois UNITED STATES		
First Author:	Janeth Aleman-Tovar, M.A.		
Order of Authors:	Janeth Aleman-Tovar, M.A.		
	Kristina Rios, PhD		
	Meghan Maureen Burke, PhD		
Manuscript Region of Origin:	UNITED STATES		
Abstract:	Due to systemic barriers, Latinx parents of youth with intellectual and developmental disabilities (IDD) report having limited involvement in transition planning. To facilitate parent involvement in transition planning, it is critical to solicit feedback from Latinx families to inform the content and mode of a transition planning intervention. The purpose of this study was to explore Latinx parents' knowledge and preferred mode for a transition planning intervention. Twenty-eight Latinx parents of transition-aged youth with IDD completed surveys and focus groups. Participants reported wanting an intervention to focus on school-based transition planning and adult services; participants wanted less information about natural supports. Regarding modality, participants desired an in-person or online training (versus a brochure). Implications for research and practice are discussed.		

1

TRANSITION PLANNING KNOWLEDGE OF LATINX FAMILIES

Transition Planning: Knowledge and Preferences of Latinx Families of Youth With

Intellectual and Developmental Disabilities

TRANSITION PLANNING KNOWLEDGE OF LATINX FAMILIES

2

Abstract

Due to systemic barriers, Latinx parents of youth with intellectual and developmental disabilities

(IDD) report having limited involvement in transition planning. To facilitate parent involvement

in transition planning, it is critical to solicit feedback from Latinx families to inform the content

and mode of a transition planning intervention. The purpose of this study was to explore Latinx

parents' knowledge and preferred mode for a transition planning intervention. Twenty-eight

Latinx parents of transition-aged youth with IDD completed surveys and focus groups.

Participants reported wanting an intervention to focus on school-based transition planning and

adult services; to a lesser extent, participants wanted information about natural supports.

Regarding modality, participants desired an in-person or online training (versus a brochure).

Implications for research and practice are discussed.

Key words: transition planning, Latinx, parents, special education, services

Transition Planning: Knowledge and Preferences of Latinx Families of Youth With Intellectual and Developmental Disabilities

In the United States, more than two million transition-aged youth with intellectual and developmental disabilities (IDD) receive special education services (U.S. Department of Education, 2020). To support transition-aged students with IDD, the Individuals with Disabilities Education Act (IDEA) mandates transition planning to prepare students for employment, post-secondary education and training, and independent living. Yet, poor post-school outcomes persist among students with IDD (Newman et al., 2011; Trainor et al., 2020). Youth with (versus without) IDD experience lower rates of: high school graduation (National Center for Education Statistics, 2019), college enrollment (National Center for Education Statistics, 2019), and employment (Roux et al., 2015). Addressing such disparities is important because of the benefits (e.g., quality of life, financial compensation) prompted by post-secondary education and employment (Jahoda et al., 2008).

Of particular concern, is the inequity in post-secondary outcomes for Latinx (i.e., a person of Cuban, Mexican, Puerto Rican, South or Central American descent, or other Spanish culture or origin, regardless of race; U.S. Census, 2010) students with IDD. Latinx (versus White) youth with IDD are more likely to drop out of high school (Office of Special Education Programs, 2020) and are less likely to enroll and complete post-secondary education (National Center for Education Statistics, 2019). It is critical to improve post-secondary outcomes among Latinx youth with IDD especially as the Latinx population continues to grow (Pew Research Center, 2020) and Latinx students are the second largest race/ethnic group of students served under IDEA (U.S. Department of Education, 2020).

Family involvement can help improve post-secondary outcomes for youth with IDD (Mazzotti et al., 2020). Indeed, family involvement in transition planning is a predictor of positive postschool outcomes (Mazzotti et al., 2020). Yet, many families report transition planning is difficult (Francis et al., 2019; Lo et al., 2020). Families report being unfamiliar with adult services and supports for their transition-aged offspring with IDD (Hirano et al., 2018). Given the roles of families, it is important to involve them in transition planning. To this end, researchers have developed interventions to increase parent knowledge about adult services (Taylor et al., 2017) and transition planning (Rowe & Test, 2010). However, there are no such programs for Latinx families despite their offspring having worse post-school outcomes. The purpose of this study was to solicit feedback from Latinx families to inform the content and mode of a transition planning intervention. To this end, it is first important to understand transition planning knowledge among Latinx parents of youth with IDD. In addition, it is important to characterize extant literature about the preferred modality of trainings for Latinx families.

Transition Planning Knowledge Among Latinx Parents of Youth with IDD

Due to systemic barriers (e.g., logistical challenges and language differences), Latinx parents of youth with IDD report difficulty accessing knowledge about transition planning (Povenmire et al., 2010). With respect to school-based transition planning, Latinx families report being unfamiliar with the phrase "transition planning" (Landmark et al., 2007) and being unaware of available services (Francis et al., 2018; Shapiro et al., 2004). Additionally, Latinx families report lacking knowledge of adult services (i.e., eligibility-based services for adults with IDD; Francis et al., 2018). Latinx families have reported difficulty accessing adult services due to: unfamiliarity with available options; difficulty completing paperwork; and child's citizenship

status (Francis et al., 2018; Povenmire-Kirk et al., 2010; Shapiro et al., 2004). Because adult services often require U.S. citizenship, some Latinx families may be more likely to rely on natural supports (i.e., unpaid supports provided by family, friends or community members; Sanderson et al., 2019). Extant research suggests Latinx families provide natural supports for their family members with and without IDD (Delgado & Rivera, 1997; Magaña, 1999). By identifying specific knowledge needs and strengths, targeted interventions can be developed to improve knowledge as well as capitalize on strengths among Latinx families.

Modalities of Transition Planning Interventions

Research is also needed to inform the mode of a transition planning intervention for Latinx families of children with IDD. Among extant research, interventions are offered in a variety of formats (e.g., brochures, in-person training, online). There is some evidence to suggest that the mode of the intervention influences its effectiveness. In a study of a transition planning intervention for parents of youth with autism spectrum disorder (ASD), Taylor and colleagues (2017) found that the intervention was more effective when offered in-person (versus online). Notably, none of the participants were Latinx. In a separate study of two parent-training approaches (i.e., Brochure only or brochure plus training) to increase knowledge of transition resources, Young et al., (2016) found that parents in the Brochure plus training group (versus brochure only) demonstrated higher knowledge of transition resources and were more likely to contact community service providers. Notably two of the participants were Latinx. Research suggests Latinx parents prefer to participate in *la platica* (i.e., social conversations among participants; Magaña, 2000). In-person or online interventions (versus brochures) may facilitate la platica. Further, many Latinx parents report that written materials (e.g., brochures) are problematic due to jargon and parents' limited reading skills (Shapiro et al., 2004). Based on

extant literature (e.g., Taylor et al., 2017; Young et al., 2016) it is important to assess which mode Latinx families prefer for a transition planning intervention.

Need for Research about Latinx Families of Transition-aged Youth with IDD

By understanding the knowledge, desires, and preferences of Latinx families of youth with IDD, researchers can create meaningful transition planning interventions. Prior research has documented the inequity in knowledge (e.g., Shapiro et al., 2004), transition planning services (Shattuck et al., 2011), and post-school outcomes (Roux et al., 2011) among Latinx families.

Accordingly, culturally responsive interventions for Latinx families are needed; to do so, it is critical to solicit input from Latinx families themselves (Magaña, 2000). To that end, this study was guided by the following research questions: (1) What is the level of parent knowledge about: school-based transition planning, adult services, and natural supports before and after participating in an abbreviated transition planning training?; (2) What types of knowledge (e.g., school-based transition planning, adult services, and natural supports) do parents want with respect to transitioning to adulthood before and after participating in an abbreviated transition planning training?; and (3) How do parents prefer to receive (i.e., online, in-person or via brochure) transition planning information before and after participating in an abbreviated transition planning training?

Method

Multiple methods were used to explore parent knowledge and preferences for a transition planning intervention. First, participants completed a pre-survey before the abbreviated training (i.e., days before the online training). Then, participants attended a synchronous, online (via Zoom) abbreviated transition planning training. At the beginning of the training, participants responded to two focus group questions. Then, didactic instruction was provided via a

7

PowerPoint presentation. Information about school-based transition planning was provided. Then, three focus group questions were asked related to school-based transition planning. Information about adult services was presented. Focus group questions related to adult services were asked. Lastly, information about natural supports was provided. Then, three focus group questions related to natural supports were asked to the participants. These questions were followed by three final focus group questions related to all of the topics. Following the training, participants were asked to complete the post-survey online or via a phone call. See Figure 1 for example focus group questions.

Although this is not an intervention study, an abbreviated training was included in this study. The training was included for two reasons. First, because Latinx parents consistently report limited knowledge about transition planning (Francis et al., 2018a; Povenmire-Kirk et al., 2010), a brief training was offered to determine whether some foundational knowledge impacted parent preferences for a transition planning intervention (Martinussen et al., 2015). Second, the training served as an incentive for participation. Extant literature suggests Latinx parents prefer to participate in research which facilitates *la platica* (i.e., social conversation among the participants and facilitator during the training; Magaña, 2000). Thus, a survey without an opportunity to participate in the *la platica* may have not garnered sufficient participants. Indeed, survey research has often been regarded as culturally unresponsive among Latinx families because it lacks *la platica* and *personalismo* (Magaña, 2000). Especially in the current geopolitical climate (Felter & Renwick, 2019), it was critical to incentivize Latinx families to participate in research.

Researcher Identity

All authors have experience teaching students with IDD and collaborating with diverse families. In some ways, this can be a strength for the authors' research identities since they have experience working with families of individuals with IDD. Another strength is that the first and second authors are Latinas and native Spanish speakers. As such, they are familiar with the Latinx culture. They were able to build trust with the participants, enabling participants to openly share their experiences (Squires, 2009). Finally, the first and third authors have family members with IDD. They are familiar with the challenges a family undergoes during transition planning.

Participants

To be included in the study, individuals needed to be a Latinx parent of a youth with IDD who was between the ages of 12-22. Participants were included if their child was at least 12 years old because parents of children with IDD have suggested transition planning should begin at the age of 12 (e.g., Francis et al., 2018b; Martinez, et al., 2012). Children over 22 years of age were excluded because they are no longer eligible for school services. Altogether, 43 Latinx parents of youth with IDD expressed interest in the study. A total of 28 participants completed all study requirements. All participants were female. Most participants were from Illinois (n = 26, 92.9%) and reported Mexican heritages (n = 25, 89.3%). Participant ages ranged from 30 to 58 years old (M = 45.19, SD = 6.42). Many participants only read and spoke Spanish (n = 13, 46.4%). In addition, 75% (n = 21) of the sample had household incomes below \$50,000. Regarding educational background, 57% (n = 16) participants reported a high school degree or less. With respect to the participants' children, their ages ranged from 12 to 22 (M = 15.11, SD = 2.74). Most children had ASD (n = 20, 42.6%). See Table 1.

Recruitment

To recruit Latinx participants, personalismo (i.e., the process of developing confianza or

trust between families and professionals) was used. Specifically, the authors relied on their established relationships with Parent Training and Information Centers, parent support groups, and disability agencies Illinois (i.e., Chicagoland area and neighboring cities) and California (i.e., Central Valley and neighboring cities). These organizations shared the recruitment flyer with their constituencies via social media and email. All materials were provided in English and Spanish. Recruitment occurred over the course of one month. Interested participants contacted the research team to determine their eligibility for the study. Each participant received a \$20 giftcard after completing all study requirements.

Procedures

This study was approved by the Institutional Review Board. The 2 hr synchronous online training was offered six times. Specifically, it was offered in Spanish (n = 4) and in English (n = 2), during weekends, weeknights, and weekday mornings. Notably, all participants only attended training once. To register, each participant completed an online consent form and a pre-survey on REDCap (Research Electronic Data Capture; Harris et al., 2009). Some (n = 9, 32%) participants chose to complete the pre-survey via the phone with the bilingual and bicultural training facilitator (i.e., the first author). The survey took approximately 15 min to complete. Participants then attended the 2 hr online training.

At the beginning of the training (before receiving any training content) participants completed a focus group (e.g., Please share your name, child's name, and age; What would you like to learn from this training?) of approximately $10 \min (M = 9.83, SD = 3.39)$. After the first focus group discussion, via a PowerPoint presentation the training portion of the training began. The training facilitator presented information for each of the three topics. After presenting the first topic (i.e., school-based transition planning) three focus group questions were asked related

to the topic (e.g., What has been your experience with school-based transition planning?). Then the training resumed, information about adult services was presented. Three focus group questions were asked (e.g., After reviewing adult services, what is something you learned?). Then, information regarding natural supports was presented. Next, three focus group questions related to natural supports were asked (e.g., After reviewing natural supports, what if any, steps are you going to take?). At the end of the training, two final focus group questions were asked (i.e., After reviewing the three topics, what topic would you like to learn most about?; For a future transition planning intervention, how would you like to receive the information?). Following each topic, the focus group discussions were between 8-17 min (M = 9.55, SD = 3.34). The concluding focus group was between 13-16 min (M = 13.5, SD = 1.89). Focus groups ranged from two to 10 participants. Upon completion of the training, participants completed the post-survey either online or via phone.

Description of the Training

The training included adapted materials from extant parent transition programs (e.g., The Volunteer Advocacy Program-Transition, Taylor et al., 2017). For each training topic (i.e., school-based transition planning, adult services, and natural supports), the following was addressed: eligibility, services, and providers. For school-based transition planning, the training facilitator provided information about transition plans, transition goals, and school services. This section reviewed: who is eligible for transition plans, what services may be provided in transition plans, and where services may be provided for school-based transition planning. For school-based transition planning, the federal guidelines of IDEA were discussed because of state differences. With respect to adult services, the training facilitator provided information about eligibility requirements for the Medicaid HCBS waiver and types of services available. For adult

services, the training focused on Home and Community-Based Services (HCBS) waivers because of the various supports (e.g., employment, housing) such waivers can provide to individuals with IDD. Regarding natural supports, the training facilitator defined natural supports as unpaid supports provided to the individual with disabilities by family, friends, and community members (Sanderson et al., 2017). The training facilitator also provided examples of the use of natural supports in each of the following areas: recreation, housing, and employment. For example, for housing, an individual with disabilities can receive support with housing options (i.e., searching for roommates by contacting friends, securing housing by contacting one's church).

To measure consistency across the multiple trainings, after each of the trainings, two research assistants completed a nine item, treatment fidelity checklist. Specifically, they watched the recording of the training and assessed whether the goals for the training were met. If an item was covered, the research assistants marked "yes". Fidelity to the training was 97.6%. Reliability for fidelity of implementation was measured by comparing the checklist between the primary observer and the secondary observer. Then, point-by-point agreement was calculated (Kazdin, 2011). The inter-rater reliability was 95.4%.

Data Collection

Focus Group Protocol

The focus group protocol consisted of 14 open-ended questions with a series of probing questions. The focus group protocol was developed using literature about: transition planning (e.g., Francis et al., 2018; Landmark et al., 2007) and Latinx families of children with disabilities (e.g., Magaña & Vanegas, 2021; Rueda et al., 2004). Prior to the study, the protocol was piloted in English and Spanish with two parents of transition-aged youth with disabilities, respectively.

Minor changes (i.e., rephrasing) were made. The protocol was semi-structured to allow for natural discussions and for participants to openly discuss their beliefs (Maxwell, 2013).

Pre- and Post-Survey Measures

The survey included categorical (e.g., gender), Likert-scale questions, ranking and multiple-choice questions. Some questions were adapted from existing measures. The survey was piloted in English and Spanish by two parents of transition-aged children with disabilities, respectively. They suggested minor changes in wording for the Spanish survey; no changes were suggested for the English survey. The first section of the survey collected demographic information about the parents and their children (e.g., gender, age, race/ethnicity, education, marital status, income). The remainder of the survey included the following measures.

Acculturation Scale. This scale consisted of five items about the participant's preferred language when: speaking with friends and family and thinking. It is a 5-point Likert-type scale (Felix-Ortiz et al., 1994). This scale has been translated into Spanish and used with Latinx families (e.g., Magaña, 1999). This scale was only used to characterize the sample.

Parent Transition Planning Knowledge Scale. Adapted from the Secondary Transition Teachers Survey (Benitez et al., 2009), this measure consisted of three questions (e.g., "Do you feel knowledgeable about adult services for young adults with disabilities?"). Participants responded using a Likert-type scale, ranging from 1 (*not at all*) to 5 (*a lot*).

Knowledge of School-Based Transition Planning. Adapted from an established special education knowledge measure (*Special Education Knowledge*, Burke et al., 2016) to only focus on school-based transition planning (i.e., federal version of IDEA), this measure included five multiple-choice questions. An example question was: "At what age does a transition plan need to be in place?" Each response was coded as incorrect = 0 or correct = 1, with summed scores

ranging from zero to five. Higher scores suggested greater knowledge of school-based transition planning.

Knowledge of Adult Services. This scale was adapted from an existing measure, *Knowledge about the Adult Service Delivery System* (Taylor, et al., 2017). The scale included five multiple-choice questions asking about the HCBS Medicaid waiver (e.g., "When can a person begin receiving Medicaid HCBS waiver services?"). Each response was coded as incorrect = 0 or correct = 1, with summed scores ranging from zero to five. Higher scores inferred greater knowledge of adult services.

Knowledge of Natural Supports. This measure was comprised of five multiple choice questions related to natural supports. It was adapted from an existing measure, *Characteristics of Informal Supports* (Sanderson et al., 2019). An example question was: "Who can provide natural supports?". Each response was coded as incorrect = 0 or correct = 1, with summed scores ranging from zero to five. Higher scores suggested greater knowledge of natural supports.

Preferences for the Content of a Future Training. To measure participants' preferences for the content (i.e., school-based transition planning, adult services, or natural supports) of a transition planning intervention, two questions were asked. First, participants were asked to rate how much information they would like on each of the topics. Participants responded using a scale ranging from 1 (*not at all*) to 5 (*a lot*). Second, participants ranked their most desired topic for a future transition planning intervention. The question was: "Rank the most wanted information as a "1" and rank the other types of information in ascending order."

Preferences for the Mode of a Future Training. To assess participants' preferences for the mode (i.e., in-person training, online training, or brochures) of a transition planning intervention, participants were asked three questions. For example, participants were asked:

"Please select how (i.e., in-person training, online training, brochures) you would want to receive information about school-based transition planning." Participants could select more than one option.

Data Analysis

Quantitative Data Analysis

First, descriptive statistics were conducted to provide a summary of the data. Notably, there were no missing data. Inferential statistics, namely paired t-tests, were conducted to determine differences from the pre- to post-survey with respect to: school-based transition planning, adult services, and natural supports. Effect sizes (*ESs*) using Cohen's *d* were conducted. Friedman's tests were conducted to determine differences between ranked questions.

Qualitative Data Analysis

Each focus group was recorded and transcribed verbatim. During the focus groups, the training facilitator wrote descriptive field notes, such as group details, participant reactions and emerging themes. There was a total of 5.2 hrs of focus group discussions. The focus group transcripts were comprised of 103 single-spaced pages. For the Spanish focus groups (n = 4), the forward/backward translation method was used to ensure the quality and accuracy of each translated transcript (Brislin, 1970).

To code the transcripts, the first and second authors (who were bilingual and bicultural) used constant comparative analysis (Creswell, 2013; Glaser & Strauss, 1967) and emergent coding (Patton, 2002). First, the authors read each transcript (in line-by-line format) multiple times to familiarize themselves with the data (Bogdan & Biklen, 2003). Utilizing constant comparative analysis, each author, independently coded the same two transcripts. Each line of data was examined and compared with the other data. If a line of data represented a distinct

concept or idea the line was given a code; if the line of data represented an idea from an established code it was given the same code. The line could have multiple codes if it represented multiple concepts. To determine if the new data represented a new idea or should be part of an existing code, the data were constantly compared with previously coded data. After independently analyzing two transcripts, the authors compared codes, resolved differences (e.g., wording of codes) via discussion, and developed a codebook (with definitions of code). The codebook also included excerpts exemplifying codes. Notably, the codebook categorized the codes as before the training or after the training. The authors also developed coding summaries, which highlighted patterns across focus groups

Using the codebook, the authors recoded the two transcripts and coded the additional four transcripts, which resulted in 54 initial descriptive codes (e.g., communication with teachers; contentious experience with school; accessed vocational rehabilitation services; language differences) that were further refined as noted below. During weekly meetings, the authors met to discuss coding summaries and refined (e.g., combined similar codes) the descriptive codes into categories (e.g., pre-training desired knowledge; transition planning experience; post-training desired knowledge; barriers or concerns; post-training desired information; post-training desired future mode of a future transition planning; barriers to mode). Categories often had subcategories. For example, the category "pre-training: desired knowledge" had three subcategories: desired information about school-based transition planning (e.g., IEPs, transition plans, transition services), desired information about the available adult services (e.g., eligibility requirements, types of services), and desired to understand the term natural supports (i.e., participants were unfamiliar with the term). The categories were then grouped into themes (i.e., limited knowledge about school-based transition planning and adult services; some knowledge of

TRANSITION PLANNING KNOWLEDGE OF LATINX FAMILIES

16

natural supports; participants desired information about school-based transition planning and adult services before and after the training; participants prefer in-person or online training; benefits of preferred mode).

Trustworthiness

To ensure trustworthiness, this study utilized multiple measures such as collaborative work, peer debriefing, informal member checks with participants, and researcher reflexivity (Brantlinger et al., 2005). All authors worked collaboratively to analyze the findings. The authors participated in weekly peer debriefing (e.g., discussed data analyses and interpretation of results). After each focus group discussion, the facilitator conducted informal member checks by summarizing the key themes for each focus group discussion. Researcher reflexivity was also utilized to ensure awareness of the biases and values of the authors. The authors approached the study valuing the Latinx culture and recognizing the systemic barriers Latinx families experience in transition planning. To address biases, during data analysis, the authors reminded themselves to stay grounded in the data (i.e., constantly immersed themselves in the data; Maher et al., 2018)

Triangulation

Triangulation is used to obtain convergence, corroboration or correspondence of results from multiple methods (Greene, 2007). To achieve triangulation in this study, focus groups and pre-and post-surveys were employed to assess parents' knowledge and preferred mode for a future transition planning intervention. By including both methods of data collection, convergence was obtained.

Findings

Level or Parent Knowledge

Quantitative Findings

In the pre-survey, most participants reported they felt either *not at all* or *a little* knowledgeable about: adult services (n = 23, 82%), natural supports (n = 19, 68%), and school-based transition planning (n = 11, 39%). In the post-survey, most participants reported feeling *very* or *extremely* knowledgeable about: adult services (n = 27, 96%), school-based transition planning (n = 21, 75%), and natural supports (n = 14, 50%). However, participants' knowledge scores on the pre- and post-survey reflected they had little knowledge about school-based transition planning and adult services (on average, participants answered 2-3 questions correctly out of five potential correct answers). From the pre- to the post-survey, there were significant increases in parent knowledge about all three topics. See Table 2.

Qualitative Findings

Limited Knowledge of School-based Transition Planning Before and After the Training. Marielena, the mother of three children with ASD, reported she was unfamiliar with school-based transition planning: "Quiero aprender de la high school porque tengo mi hija la mayor, pero en realidad no se los movimientos [de planificación de la transición]. *I want to learn about high school because I have my oldest daughter, but I don't really know the procedures [of transition planning].*" Notably, parents of younger children (ages 12-13) expressed wanting to learn about transition planning before their child became transition-aged (i.e., age 14.5). Yvette, the mother of a 13-year-old with ASD, reported, "I've been hearing a lot about transition planning and how you should start really early instead of starting when they're in high school." After the training, participants reported they learned about transition planning, including the age requirement for transition planning. However, they had lingering questions. In a post-training focus group, participants remarked:

Sandra: So, when that time comes [my son turns 16 years old], do I proactively have to tell them [the IEP team] I know about this place [Vocational Rehabilitation] and to invite them to the meeting?

Limited Knowledge of Adult Services Before and After the Training. During the pretraining focus groups, participants reported limited knowledge of adult services. Reina a mother of a 17-year-old daughter with ASD reported: "Estoy interesada en saber de los apoyos para las personas adultas ya que no sé qué voy a hacer con ella después de que termine la secundaria. I am interested in knowing the supports for adults since I do not know what I am going to do with her after she finishes high school." After the training, participants reported that they learned about HCBS Medicaid waiver. However, they continued to have concerns about eligibility for other adult services. Martha, the parent of an 18-year-old son with cerebral palsy asked: "En caso de que no sea residente ni ciudadano [estadounidense] hay algunos otro tipo de servicios o ya no hay otro tipo de servicios como adultos? In case they are not a [U.S.] resident or citizen, are there some other types of services or are there no other types of services as adults?" Similarly, some participants questioned whether their high-functioning youth with ASD would qualify for waiver services. Victoria a mother of a 14-year-old with ASD, reported, "Mi niño no interactúa, él es muy tranquilo, es muy ordenado, yo sé que no podría -a lo mejor- recibir los servicios que mencionaban del HCBS. My child does not interact. He is very calm. He is very orderly. I know that he could not -maybe- receive the services you mentioned by the HCBS."

Limited Knowledge of Adult Services Before and After the Training. Reina a mother of a 17-year-old daughter with ASD reported: "Estoy interesada en saber de los apoyos para las personas adultas ya que no sé qué voy a hacer con ella después de que termine la secundaria. I am interested in knowing the supports for adults since I do not know what I am going to do with

her after she finishes high school." After the training, participants reported that they learned about HCBS Medicaid waiver. However, they continued to have concerns about eligibility for other adult services. Martha, the parent of an 18-year-old son with cerebral palsy asked: "En caso de que no sea residente ni ciudadano [estadounidense] hay algunos otro tipo de servicios o ya no hay otro tipo de servicios como adultos? In case they are not a [U.S.] resident or citizen, are there some other types of services or are there no other types of services as adults?" Similarly, some participants questioned whether their high-functioning youth with ASD would qualify for waiver services. Victoria a mother of a 14-year-old with ASD, reported, "Mi niño no interactúa, él es muy tranquilo, es muy ordenado, yo sé que no podría -a lo mejor- recibir los servicios que mencionaban del HCBS. My child does not interact. He is very calm. He is very orderly. I know that he could not -maybe- receive the services you mentioned by the HCBS."

Increased Knowledge of Natural Supports After the Training. Interestingly, after learning the definition of natural supports from the training, participants reported having knowledge and experience with natural supports. After the training, only one (3%) participant reported wanting a transition planning intervention to focus on natural supports. During a pretraining focus group, Linda, a mother of a 13-year-old with ASD, stated, "Y si me gustaría también [aprender] de los temas que llenamos en la encuesta están muy interesantes. And yes, I would also like to [learn] about the topics that we filled out from the survey, they are very interesting." During the training, participants realized they were already providing natural supports. Leti shared her son's community involvement experience, "También lo involucramos de diferentes formas con el Park District vía Zoom. El ha participado en diferente programas. We also involve him in different ways with the Park District via Zoom. He has participated in

different programs." Participants remarked that once they learned the definition of natural supports, they could report they were already providing such supports to their children.

Synthesis

Although participants learned foundational knowledge about each of the topics, participants had lingering questions after the training and their knowledge scores reflected limited knowledge. The focus group discussions illuminate participants' desires to learn more about school-based transition planning and adult services.

Types of Desired Knowledge

Quantitative Findings

In the pre-survey, participants reported wanting *very* much information about all three topics: adult services (M = 4.5, SD = .57), school-based transition planning (M = 4.32, SD = .82), and natural supports (M = 4.29, SD = .85). With respect to rankings, participants reported wanting the *most* information about school-based transition planning (n = 14, 50%), adult services (n = 12, 43%), and, to a much lesser extent, natural supports (n = 2, 7%). Notably, there was a significant difference in the type of knowledge participants wanted to receive, χ^2 (2) = 16.92, p < .001. Post hoc analyses revealed that participants were significantly more likely to want information about school-based transition planning (versus natural supports) (Z = -3.57, p < .001). Further, participants were significantly more likely to want information about adult services (versus natural supports) (Z = -3.09, p = .002). There were no significant differences with respect to knowledge about adult services and school-based transition planning.

After the training, participants were less likely to want information about natural supports. In the post-survey, participants reported wanting *very* much information about adult services (M = 4.43, SD = .57) and school-based transition planning (M = 4.0, SD = .98) and *some*

information about natural supports (M = 3.61, SD = .96). Participants reported wanting the *most* information about: school-based transition planning (n =15, 53.6%), adult services (n = 12, 42.9%), and, to a much lesser extent, natural supports (n = 1, 3.6%). Notably, there was a significant difference perceived in the type of knowledge participants wanted to receive χ^2 (2) = 23.57, p <.001. Post hoc analyses revealed that participants were significantly more likely to want information about school transition planning (versus natural supports) (Z = -3.86, p <.001). Further, participants were significantly more likely to want information about adult services (versus natural supports) (Z = -4.25, p <.001). There were no significant differences with respect to knowledge about adult services and school-based transition planning.

Qualitative Findings

In the pre-focus group, participants stated they wanted more general information about the three topics. After the training participants desired information about school-based transition planning services, goals, and graduation options. Many participants stated they desired more information about adult services. Specifically, participants wanted to know about eligibility requirements and existing services (e.g., housing and employment). Natural supports was the least desired type of information. However, some participants wanted to know about the types of natural supports other parents were providing their children. See Table 3 for participant quotes.

Synthesis

Analysis of the focus group discussions complemented the quantitative findings suggesting that participants desired more information about school-based transition planning and adult services (versus natural supports) in a future transition planning training.

Modality of Transition-Planning Training

Quantitative Findings

In the pre-survey, many participants preferred an online platform (n = 50, 59.5%) or an in-person training (n = 50, 59.5%), and, to a lesser extent, a brochure (n = 26, 31%). However, in the post-survey, an online platform was preferred by most participants (n = 75, 89.3%); to a lesser extent, participants preferred an in-person training (n = 50, 59.5%) or a brochure (n = 50, 59.5%). Notably, participants were able to select more than one mode.

Qualitative Findings

Participants Prefer Information via In-person or Online Trainings. The focus group discussions reinforced the preferences identified by the quantitative findings. However, the discussions indicated that context mattered. For example, participants reported that, with COVID-19, an online platform may be more appropriate for a future transition planning intervention. Raquel a mother of a 12-year-old daughter with ASD, reported, "If we're doing the intervention during COVID-19, of course it should be online. But if it's not during COVID, I like to go to in-person trainings." In addition, through the focus group discussions, participants listed the benefits for each of the preferred modes. Notably, participants did not identify any benefits to receiving information via a brochure or pamphlet. See Table 3.

Synthesis

Overall, participants consistently preferred an in-person or online training over a brochure; however, at the post-survey, participants were more likely to prefer an online training (versus in-person training).

Discussion

The purpose of this study was to explore the knowledge and preferences of Latinx parents in regard to a future transition planning intervention. The study produced four main findings.

First, participants wanted the most information about school-based transition planning and adult

services; to a lesser extent, participants were interested in natural supports. This finding aligns with extant literature which documents that, due to systemic barriers, Latinx parents have limited knowledge of school-based transition planning (Francis et al., 2018) and adult services (Landmark et al., 2007). As reported by participants, their limited knowledge was the impetus for wanting more information about transition planning and, accordingly, participating in this study.

Notably, the majority of participants was less interested in information about natural supports in a future transition planning training. Specifically, participants reported that information about natural supports could be offered but only in conjunction with information about school-based transition planning and adult services. Natural supports seem especially important in predicting positive benefits (e.g., resilience) for families of children with IDD (Fong et al., 2020). Less interest in natural supports may be because participants were already providing natural supports to their youth with disabilities. Consequently, participants did not need more information regarding such supports. Indeed, consistent with extant literature (Delgado & Rivera, 1997; Geenen et al., 2001), participants suggested that natural supports naturally occurred often in Latinx families.

Second, prior to the training, participants reported having limited knowledge of school-based transition planning and adult services. After the training, participants reported they gained information; however, they had lingering questions. The findings suggest a more intensive transition planning intervention for Latinx parents may be warranted. In other transition planning training interventions for families, the interventions were between 12-24 hours (e.g., DeWalt et al., 2018; Taylor et al., 2017). Thus, a transition planning intervention for Latinx families may need to be similarly intensive.

Third, after participating in the training, participants were more likely to report wanting an online (versus in-person) platform for the mode of a future transition planning training.

Notably, participants may have selected the online mode due to the social distancing guidelines of COVID-19. Their selection may have also been impacted because they used an online platform for the training in the current study. With the online platform, their experience may have altered their perceptions of an online training's ability to offer *la platica* (Magaña, 2000).

Extant literature has documented the benefits of online platforms for special education parent trainings (Burke et al., 2018; Rowe & Young, 2010). Benefits include limited traveling and childcare expenses. Future research should investigate Latinx parents' preferred mode of training after the effects of the COVID-19 restrictions have subsided. Notably, participants were only presented with three modality options (i.e., online, in-person, or brochure). However, there are other options (e.g., parent support groups or websites) which participants may prefer. Future research needs to be more inclusive regarding potential modalities.

Finally, participants reported that a future transition planning intervention should include parent advocacy skills. It is especially important to include tips for undocumented parents. Participants suggested undocumented parents may be afraid to request adult services for their youth with US citizenship because of their (i.e., the parent's) immigration status. This finding aligns with extant literature which suggests undocumented parents are less likely to access medical services (Martinez et al., 2013) or diagnoses (Magaña et al., 2013) for their children because they fear exposing their immigration status. Participants recommended that future interventions should include advocacy skills to empower parents to request services for their youth with disabilities. Additionally, participants suggested including eligibility requirements

(e.g., citizenship requirements) for adult services and including examples of natural supports parents can provide for their youth.

Limitations

This study was conducted during the COVID-19 pandemic. Thus, the transition planning training was unable to be offered in-person. This may have caused selection bias because only individuals with access to technology were able to participate in the training. Indeed, Latinx (versus White) families are significantly more likely to lack internet access (Pew Research Center, 2016). To this end, researchers should consider providing hotspots and technological devices to facilitate access to online trainings. Second, the study had a small, convenience sample of mothers of children with ASD. It is unclear whether the findings are generalizable to families of children with other types of disabilities or to fathers of youth with disabilities. Third, the sample was homogenous, with most participants identifying as Mexican. Thus, there is limited generalizability of the findings to all Latinx families. Intra-cultural differences may exist based on a participant's country of origin (Magaña, 2000).

Implications for Practice

Practitioners may consider offering parent trainings online and in-person. Online trainings may eliminate barriers to Latinx parent participation such as childcare (Gonzalez et al., 2018) and transportation (Geenen et al., 2003). In-person trainings can provide parents the opportunity to engage in *la platica* and learn from their peers' experiences. By providing trainings via multiple modes, practitioners can be responsive to the needs of Latinx parents.

Practitioners should provide information about adult services and, accordingly, engage in interagency collaboration. Because of the systemic barriers precluding knowledge among Latinx families (Landmark et al., 2007), practitioners should educate families about adult services. This

can be done by engaging in interagency collaboration to ensure families learn about available adult services. Interagency collaboration is key for successful transitions (Test et al., 2009). Accordingly, practitioners should invite adult agency members to transition planning meetings to explain their services. Practitioners can also distribute information about community involvement opportunities by inviting staff from their local recreational center. The staff can provide information about recreational opportunities for the youth. Notably, for Spanish-speaking families, it is important that there is a trained interpreter and documents provided to the family are in Spanish.

Implications for Future Research

Based on the findings from this study, there are several implications for research. Specifically, Latinx parents reported that they wanted a future transition planning intervention to focus on school-based transition planning and adult services. Such a transition planning intervention for Latinx families should be tested with a large sample and a rigorous research design. For example, an adequately-powered randomized control trial (RCT) could be conducted to determine the effectiveness of a transition planning training for Latinx families. To attribute increases in parent knowledge and other skills to the intervention, it is important to include a control group (versus intervention; Campbell & Stanley, 1963).

Future research should also test whether an in-person (versus online) modality is more effective for Latinx families. Extant literature suggest Latinx parents prefer to participate in research studies in which they are able to participate in *la platica* (Magaña, 2000). Accordingly, researchers should measure Latinx parents' experience with an online *platica* (versus an in-person *platica*). It is also important to assess differences between modality (online versus in-person) of the training in regard to parental knowledge. Taylor and colleagues (2017) found that

a transition planning intervention for parents of youth with ASD was more effective when offered in-person (versus online). Notably, participants demonstrated increases in advocacy and empowerment when they received the training in-person (versus online). As such, future research should measure the effects of modality among Latinx participants.

References

- Benitez, D. T., Morningstar, M. E., & Frey, B. B. (2009). A multistate survey of special education teachers' perceptions of their transition competencies. *Career Development for Exceptional Individuals*, 32(1), 6-16. https://doi.org/b3sjzn
- Burke, M. M., Mello, M., & Goldman, S. (2016). Examining the feasibility of a special education advocacy training. *Journal of Developmental and Physical Disabilities*, 28, 539-556. https://doi.org/f9nwp3
- Burke, M. M., Waitz-Kudla, S., Rabideau, C., Taylor, J. L., & Hodapp, R. M. (2018). Pulling back the curtain: Issues in conducting intervention studies with transition-aged youth with ASD and their families. *Autism*, *23*(2), 514-523. https://doi.org/f2xr
- Delgado, M., & Rivera, H. (1997). Puerto Rican Natural Support Systems: Impact on families, communities, and schools. *Urban Education*, *32*(1), 81-97. https://doi.org/bdd99s
- DeWalt, L. S., Greenberg, J. S., & Mailick, M. R. (2018). Transitioning Together: A multifamily psychoeducation program for adolescents with ASD and their parents. *Journal of Autism and Developmental Disorders*, 48, 251-263. https://doi.org/gcvqw5
- Francis, G. L., Gross, J. M. S., Lavín, C. E., Velazquez, L. A. C., & Sheets, N. (2018). Hispanic caregiver experiences supporting positive postschool outcomes for young adults with disabilities. *Intellectual and Developmental Disabilities*, *56* (5), 337–353.
- Francis, G. L., Regester, A., & Reed, A. S. (2019). Barriers and supports to parent involvement and collaboration during transition to adulthood. *Career Development and Transition for Exceptional Individuals*, 42(4), 235-245. https://doi.org/f2xt
- Geenen, S., Powers, L. E., & Lopez-Vasquez, A. (2001). Multicultural aspects of parent involvement in transition planning. *Exceptional Children*, 67(2), 265-282.

- Gonzalez, L. M., Border, L. D., Hines, E. M., Villalba, J. A., & Henderson, A. (2018). Parental involvement in children's education: Considerations for school counselors working with Latino immigrant families. *Professional School Counseling*, *16*(3), 185-193.
- Hirano, K. A., Rowe, D., Lindstrom, L., & Chan, P. (2018). Systematic barriers to family involvement in transition planning for youth with disabilities: A qualitative metasynthesis. *Journal of Child and Family Studies*, 27, 3440-3456. https://doi.org/gff3df
- Johnston-Gurrerro, M. P. (2016). Embracing the messiness: Critical and diverse perspectives on racial and ethnic identity development. *New Directions for Student Services*, *154*, 43–55.
- Landmark, L. L., Zhang, D. D., & Montoya, L. (2007). Culturally diverse parents' experience in their children's transition: Knowledge and involvement. *Career Development for Exceptional Individuals*, 30(2), 68-70. https://doi.org/ftxdhs
- Lo, L. & Bui, O. (2020). Transition planning: Voices of Chinese and Vietnamese parents of youth with autism and intellectual disabilities. *Career Development and Transition for Exceptional Individuals*, 43(2) 1-12. https://doi.org/f2x4
- Lopez, M. H., Gonzalez-Barrera, A., & Patten, E. (2013). Closing the digital divide: Latinos and technology adoption. Pew Research Center. https://tinyurl.com/wbyr34st
- Magaña, S. M. (2000). Mental Retardation Research Methods in Latinx Communities. *Mental Retardation*, 38(4), 303-315. https://doi.org/dz525m
- Mazzotti, V. L., Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W., Fowler, C. H., Poppen, M., Sinclair, J., & Test, D. W. (2020). Secondary transition predictors of postschool success:

 An update to the research base. *Career Development and Transition for Exceptional Individuals*, 44(2), 47-64. https://doi.org/f2xx

- National Center for Education Statistics (2019). Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-11 through 2017-18. https://nces.ed.gov/programs/digest/d19/tables/dt19 219.46.asp
- Noe-Bustamante, L. & Flores, A. (2019) Facts on Latinos in the U.S. https://www.pewresearch.org/hispanic/fact-sheet/latinos-in-the-u-s-fact-sheet/
- Pew Research Center (2020). U.S. Hispanic population surpassed 60 million in 2019, but growth has slowed. https://www.pewresearch.org/fact-tank/2020/07/07/u-s-hispanic-population-surpassed-60-million-in-2019-but-growth-has-slowed/
- Roux, A. M., Shattuck, P. T., Rast, J. E., Rava, J, A., & Anderson, K. A. (2015). *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A. J. Drexel Autism Institute, Drexel University.
- Rowe, D. A., & Test, D. W. (2010). The effects of computer-based instruction on the transition planning process knowledge of parents of students with disabilities. *Research and Practice for Persons with Severe Disabilities*, 35(3). 102-155. https://doi.org/f2xz
- Sanderson, K. A., Burke, M. M., Urbano, R. C., Arnold, C. K., & Hodapp, R. M. (2019). Getting by with a little help from my friends: siblings report on the amount of informal support received adults with disabilities. *Journal of Intellectual Disabilities Research*, 63 (9), 1097-1110. https://doi.org/f2x2
- Taylor, J. L., Hodapp, R. M., Burke, M. M., Waitz-Kudla, S. N., & Rabideau, C. (2017).

 Training parents of youth with autism spectrum disorder to advocate for adult disability services: results from a pilot randomized controlled trial. *Journal of Autism*Developmental Disorders, 47, 846-857. https://doi.org/f9zwwx

Figure 1.

Sequence of Procedures

Participants completed a pre-survey via REDcap or via a phone call a few days before the training.

Before the Training

On the day of the training, two focus group questions were asked *before* the start of the training (i.e., Please share your name, child's name and age; What would you like to learn from this training?).

Information about school-based transition planning was presented via PowerPoint presentation.

Three focus group questions related to school-based transition planning were asked (e.g., What has been your experience with school-based transition planning?).

Information about Home and Community Based Services (HCBS) Medicaid Waiver was presented via a PowerPoint Presentation

During the Training

Three focus group questions related to the HCBS Medicaid waiver were asked (e.g., What has been your experience with adult services?).

Information about natural supports was presented via PowerPoint presentation.

Three focus group questions related to natural supports were asked (e.g., After reviewing natural supports, what is something you learned).

After the Training

Participants completed a post-survey via REDcap or a phone call at the end of the training or a few days after the training.

Two focus group questions at the *end* of the of the training (e.g., After this training about transition planning, what information what would you like to learn most about?; For a future transition planning intervention, how would like to receive the information?)

1

TRANSITION PLANNING KNOWLEDGE OF LATINX FAMILIES

Table 1Participant Demographics

% (<i>N</i> = 28)		
70 (IV - 20)		
89.3% (25)		
10.70% (3)		
10.7070 (3)		
60.7% (17)		
17.9% (5)		
14.3% (4)		
3.6% (1)		
` '		
3.6% (1)		
21 40/ (6)		
21.4% (6)		
35.7% (10)		
17.9% (5)		
7.1% (2)		
10.7% (3)		
7.1% (2)		
22 10/ (0)		
32.1% (9)		
25% (7)		
17.9% (5)		
21.4% (6)		
3.6% (1)		
16.407.740		
46.4% (13)		
35.7% (10)		
14.3% (4)		
3.6% (1)		
32.14% (13)		
14.3% (10)		
17.86% (5)		
42.6% (20)		
8.5% (7)		
12.8% (6)		
8.5% (4)		
8.5% (4)		
4.3% (2)		
4.3% (2)		

^{*}Participants could select more than one type of disability

 Table 2

 Knowledge of School-Based Transition Planning, Adult Services, and Natural Supports Before and After the Abbreviated Training

	Pre: Mean (SD)	Post: Mean	t	p	ES
		(SD)			
School-based Knowledge	3.21 (1.32)	4.11(.92)	-3.32	.003	.79
Adult Services Knowledge	2.54(1.32)	3.71 (.98)	-4.99	< .001	1.01
Natural Supports Knowledge	2.07(1.44)	4.46(.84)	-8.59	< .001	2.03

 Table 3

 Participant Desired Information Before and After the Training

Adult services	Natural supports
Pre-training: What happens after high school: "I don't know what happens afterwards [after high school] and I want to know beforehand to prepare." Post-training: Available adult services "A mi me gustaría saber mas sobre los servicios formales para adultos porque [el personal de la escuela] me dicen que mi hija no califica para nada. Yo que estoy pasando por eso y es muy difícil obtener servicios cuando llegan a los 22 y ya no van a la escuela. I would like to know more about adult services because they [school personnel] tell me my daughter doesn't qualify for anything. I am going through that now. It is very difficult to obtain services when they reach 22 and no longer go to school." Post-training: Eligibility requirements "Creo que los padres pueden ser indocumentados y es por eso que no quieren pedir ayuda o tienen miedo de pedir ayuda para sus hijos que son ciudadanos. Decirles a los padres que sus hijos	Pre-training: More information "What I would like to learn from this training, I guess I would like to know a little bit more about what resources are out there for transition planning and for natura supports." Post-training: Learn about natural supports from families "I think ideas of what natural supports parents are already providing, you know, And I think bouncing ideas off of each other is great."
	Pre-training: What happens after high school: "I don't know what happens afterwards [after high school] and I want to know beforehand to prepare." Post-training: Available adult services "A mi me gustaría saber mas sobre los servicios formales para adultos porque [el personal de la escuela] me dicen que mi hija no califica para nada. Yo que estoy pasando por eso y es muy difícil obtener servicios cuando llegan a los 22 y ya no van a la escuela. I would like to know more about adult services because they [school personnel] tell me my daughter doesn't qualify for anything. I am going through that now. It is very difficult to obtain services when they reach 22 and no longer go to school." Post-training: Eligibility requirements "Creo que los padres pueden ser indocumentados y es por eso que no quieren pedir ayuda o tienen miedo de pedir ayuda para sus hijos que son

Table 4Benefits of Preferred Modes

Online training

Safest mode due to pandemic

"Si yo también pienso que ahorita [durante las restricciones de COVID-19] en línea es lo mejor. *I also think that right now [during Covid-19 restrictions] online is the best.*"

Participants can join from various locations

"En línea [para que] otras personas que no viven en Chicago se puedan incluirse en el grupo. Online [so] other people who do not live in Chicago can join the group."

Ability to converse with other parents

"A mí me gustaría así en línea creo que nos da el espacio para poder hablar y hacer preguntas y expresar nuestras preocupaciones. I would like it online I think it gives us the space to be able to speak and ask questions and express our concerns."

Elimination of transportation barriers

"En línea no tienes que estar en el trafico o transporte publico. Yo creo que esta va a ser la nueva forma de hacer la reuniones. *Online you do not have to go out, you do not have to be in traffic, public transport. I think this is going to be the new way of holding meetings.*"

Elimination of childcare

"Aquí [en casa] estoy más cómoda porque no dejo a mis hijos solos. Here [at home] I am more comfortable because I don't leave my children alone."

In-person training

Relationship building with other parents

"Entonces puedo crear relaciones entre nosotros padres. Esa es una de las gran ventajas de estar en persona. Then you can create relationships between us parents. That is one of the great advantages of being in-person."

Learn from other parents' experiences

"En persona porque yo también aprendo de otras personas. *In-person because I also learn from other people.*"

Increased parent engagement

"But if it's not COVID, I like to go to in-person trainings. You are just able to focus more to sit there and you're really engaged."

Supplemental Material

Click here to access/download **Supplemental Material**SupplementalMaterial_IDD.docx