

# Caregivers' Evaluation of an Interprofessional Family-Centered Early Childhood Program

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## Abstract

Interprofessional family-centered practices provide support to children and families, for children with significant developmental delays. The interprofessional Structured Learning Program (iSLP) affords opportunities to engage parents in team processes and build parent capacity while targeting the developmental needs of their children. The purpose of this programmatic evaluation provides a first-person account of parents' perceptions of the iSLP and their evaluation of an interprofessional experience. The iSLP was grounded in the core principles and competencies of the Early Childhood Personnel Center for family-centered, cross disciplinary interprofessional team processes. The iSLP included students and faculty from multiple disciplines in an authentic clinical education experience. Four mothers of young children were invited to participate in the assessment process. Program evaluation data were analyzed using QDA Minor Lite software and results identified 2 categories: process- or product-oriented factors. Four themes emerged across 2 categories that related to program design, impact of program on the family and child, and changes in beliefs about the child. This data also provided insights for program refinement and offered support for including participating caregivers in the evaluation of interprofessional early childhood programs.

## Implications of interprofessional practice

Interprofessional Practice (IPP), by design, expects that professionals will listen to, share, and support the other team members. When early education professionals prescribe to an IPP model, they can learn from each other, establish and work towards collaborative goals, and focus on efficient and effective service delivery [1]. Paramount to the success of IPP in early intervention (EI), is the authentic inclusion of caregivers on the team. When caregivers are educated, supported, and encouraged to engage in their child's educational and treatment processes, the child can benefit from on-going intervention, because caregivers feel prepared and confident to offer this level of support even when professionals are not present [2]. Helping families recognize the value they bring to the IPP team, benefits both the child and the family system [3].

This article provides the results of an evaluation completed on a newly formed IPP university-based program. This unique evaluation activity was conducted with parents who chose to enroll their child in this IPP/Interprofessional Education (IPE) EI setting. The perspectives provided by the parents offer evidence supporting the importance of including caregivers on IPP/IPE teams; and, the data extends the literature reporting caregivers' first-hand assessment of IPP/IPE programs. It also highlights the significance of designing IPP/IPE programs for pre-professional students, affording them the opportunity to experience parents as active and valued members of interprofessional teams.

## Introduction

Often, children who have developmental impairments, including those who have been diagnosed on the autism spectrum, receive some type of early intervention (e.g., infant/toddler services, private speech-language therapy, applied-behavioral analysis [ABA]). However, the

parents seeking services at a University Speech and Language Clinic expressed concern that their children were not going to be prepared to navigate a 3-year-old preschool despite having received early intervention. Consequently, they sought additional support that would assist with this transition. Parents desired to enhance their children's communication, social, and daily living skills within a small group, interprofessional setting. The university faculty recognized the need to create a program that would address children's developmental needs to successfully navigate the transition to preschool, while embedding the parents in the interprofessional team process. Such a program did not exist in the community. The interprofessional Structured Learning Program (iSLP) was established with the over-arching goal to provide children and families with the intervention, support, and resources needed to enable them to successfully transition to a community-based, 3-year-old preschool of their choosing.

The formation of a safe and productive intervention environment affords collaborative problem solving and creative thinking among EI professionals and family members [4]. When this occurs, caregivers feel assured that their child is in a family-centered and culturally responsive treatment environment that is safe and productive [1,2]. The iSLP faculty, which included multiple disciplines, sought to ensure a family-centered perspective that promoted the principles defined by the national Early Childhood Personnel Center (ECPC). One of the four Cross-Disciplinary Core Competencies states Family-Centered practices are

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defined as, “The delivery of culturally competent and family responsive early childhood intervention that respects and facilitates a family’s active partnership and participation in the assessment, planning, implementation, and monitoring of the interventions delivered to their child and themselves” (Early Childhood Personnel Center, 2020).

As Gutkin [5] noted, nearly 25 years ago, the need to evaluate and document the outcomes of collaborative services is critical but the process of providing human services often does not emphasize reporting efficacy and assessment measures. Such outcome evaluations should include caregivers, however, there exists a paucity of research investigating caregivers’ evaluation of interprofessional team assessment and intervention for their young child. James [6] reported a comprehensive literature review assessing the relationship between professionals and the caregiver, including 46 studies that reported either quantitative or qualitative measures. James’ findings emphasized parents’ need for building trust, good communication, respectful regard, and the need for professionals to provide current, evidence-based information.

The purpose of this article is to report a qualitative programmatic evaluation of the newly formed iSLP from the parents’ perspective. A qualitative approach was selected because of its focus on describing participant experience to better understand the successes and challenges of the program. Further, an overview of the theoretical and evidence-base underpinning the structure of the program will be provided. The two areas of focus include: 1) the importance of interprofessional, family-centered practice; and 2) evaluating parents’ perceptions of the interprofessional nature of the program.

## Review of the literature

### Importance of Interprofessional, Family-Centered Practice

Caregivers have reported positive experiences and improved outcomes when healthcare and education professionals have worked in partnership to meet the needs of their loved ones [4]. Not only do caregivers recognize the benefit of taking an active role in their child’s intervention and service delivery, but they also understand that by doing so, outcomes are achieved more effectively [1,2]. When caregivers are valued partners in their child’s care, they have the opportunity to acquire new skills, feel empowered, and become better equipped to access and make use of appropriate supports and resources for all members of the family [7]. Ultimately, as caregivers respond to changes in their child’s development, the family system is positively impacted [2,4,8].

Interprofessional communication involves team members interacting with one another in a professional manner and keeping everyone updated. Early Intervention IPP teams are only complete when caregivers are included in communication and as equal partners in the teaming process. With proper communication, relationships are formed, trust is built, and safe spaces that encourage open and honest communication are created [9].

When EI team members have a working knowledge of family systems theory, they are better prepared to appreciate the significance of adopting family-centered practices and ensure families are involved in their child’s intervention plan [2,8]. Interprofessional teams, who value the principles upon which family systems theory is grounded, acknowledge that the family operates as an interconnected system. They understand that what positively or negatively impacts the child/client, will also, most likely, impact the family in a similar manner [8,10]. Therefore, when collaborative teams implement family-centered practices and regard the family as the center of service delivery, they

increase the likelihood of achieving effective and sustainable outcomes for the entire family [2,8]. Families must be at the center of EI service provision and supported in ways that help them to proactively advocate on behalf of their children and family members [1].

Families deserve the highest quality treatment for their loved ones. Unfortunately, it has been reported that not all professional teams function effectively [11]. Ineffective teams can put client safety at risk, and the likelihood of a poor outcome is increased [12]. Furthermore, client and family satisfaction is negatively affected because family members feel as though they have not been heard, their concerns have been disregarded, and/or they have not been involved in the planning or implementation of their child’s treatment [8]. The Cross-Disciplinary Core Competencies, articulated by the ECPC, were compiled from principles and evidence-based research representing multiple education and health-care professional organizations. A tenet of the iSLP promotes those four competencies, which include Family-Centered Practice, Evidence-Based Intervention, Coordination and Collaboration, and Professionalism (Early Childhood Personnel Center, 2020). Valuing the family and providing ethical services, consistent with these competencies, demands that communication be matched to the adult and tuned to the developmental level of the child. Communication must be sensitive to the unique cultural and linguistic differences among families and contribute to team members’ collective understanding of how these communicative behaviors impact all aspects of service delivery [13]. By embedding families in the network of professionals, they are more accurately heard and better equipped as “both consumers and participants in the delivery of care” [9].

That parents have not always been satisfied with the outcomes of family-professional interactions has been attributed to the family’s sense of a power differential, in which the professional holds the more powerful/directive position [14]. In studies reported by Todd and Jones [9], parents expressed the power differential in terms of the “professional voice” which had the effect of muting the parent’s voice. Mothers often felt their voice was muted when they dealt with professionals, especially when there was insufficient time devoted to “get to know and build trust—a key but lacking quality in dealing with professionals” (p. 238). Further, parents perceived professional power as “potential barriers to accessing schools, medical treatment or advice” (p. 235). Dempsey and Dunst’s [7] examined ‘help-giving’ models to determine factors most essential to creating an empowering environment for parents who had children with disabilities. The authors concluded that “there is a substantial relationship between help-giving practices and family empowerment, and that both relational and participatory components of help-giving are crucial in the facilitation of empowerment” (p. 49). Such evidence speaks to the importance of embedding parents in the interprofessional team process, through which they can develop relationships while participating as essential members of the service delivery team.

Caregivers are experts on their child and provide valuable information to the team [1]. According to Cooper-Duffy and Eaker [4], parents gave negative feedback when treatment teams did not commit to interprofessional practice. They reported that the system lacked team collaboration and excluded parents; and in these situations, the parents often lacked trust in the experts’ insight. It was noted that this can be especially detrimental during times of transition when systems and families may experience disruptions in services and/or personal life. A team that does not involve the family is a team that may have a low-quality outcome, despite the expert’s knowledge, because the expertise of the parent is not heard or valued equally [4].

It has been reported that many traditional treatment models have fractured communication systems and limited collaboration, thereby, resulting in poor health and social care outcomes for patients and families [15]. Family-centered care defines the child in the context of their family as the client. In this dynamic model of care, in collaboration with the family, the needs will best be met [16]. MacKean and colleagues noted that one of the six key elements of family-centered care that has been neglected was true collaborative relationships between families and professionals [16]. They reported “a loss of focus on what many families, and some health-care providers, see as equally important elements of family-centered care, is the development of true collaborative relationships between families and health-care providers” (p. 76).

### Interprofessional Structured Learning Program Description

To meet the goals of the early childhood program, the iSLP included (a) children ages 2 – 4 years, who demonstrated communication, social, and structured learning needs; (b) caregivers, who observed and participated in clinical sessions; and, (c) pre-professional students and faculty, who represented multiple disciplines (i.e., speech-language pathology, early childhood, special education music, occupational and physical therapy). Sessions were conducted in the fall and spring semesters. Each semester lasted 14 weeks and the children attended two times per week. Individual visual schedules and work systems were developed. These structured teaching elements assisted children to navigate classroom activities within structured, predictable routines.

The children, three males and one female, ranged in age from 2.5 – 3.5 years of age at the time of enrollment in iSLP. All children were Caucasian and were from monolingual, two-parent homes. Three of the four children were first born, the other was a twin. All had adequate, unaided hearing and vision throughout their participation in the program. One of the boys, who was 2.5, had been diagnosed with autism when he was 2 years old. He had participated in an ABA program, but his parents felt he would benefit from a communication program designed to support peer interactions prior to enrolling in a community-based preschool program. The second boy, who was 3.2 years of age, had been evaluated for autism but did not receive a diagnosis. His mother was not prepared to place him in a public-school program but recognized his need for communication and social skill intervention. The third boy had received a diagnosis of autism when he was 2 years old. His parents were hesitant to put him in treatment at that time, as they were concerned his aggressive behaviors would be problematic and they did not know how he might interact with other young children. The parents decided to enroll him in iSLP shortly after his diagnosis (at 2.3 years) when they felt he needed more intervention than could be offered by the local infant/toddler program. The girl, who was 3.5 at the time of her enrollment, had experienced a traumatic brain injury. Her parents had enrolled her in individual speech-language treatment, but within a few months recognized she needed to experience a small group with structured peer supports before attempting to enroll her in a school-based preschool program. All four children demonstrated moderate to severe communication and social skill deficits. They also demonstrated gross and fine motor challenges as well as sensitivities to a variety of sensory stimuli (e.g., touch, sound, movement).

All parents recognized their child would benefit from a small group program that emphasized communication and social development within a structured, interprofessional, team-based classroom setting. However, each parent expressed concern for their child's ability to successfully participate in this type of environment. Further they appeared anxious about the type of progress that might be achieved

and if their child would be prepared to transition to a community-based preschool program. At the outset of the program, it was strongly recommended that at least one of the child's caregivers remain at the clinic in the observation room while the child participated in iSLP sessions. During this time, caregivers were encouraged to ask questions of the clinical educators and graduate student clinicians (representing the disciplines of speech-language pathology, physical therapy, occupational therapy, early childhood, special education music). They engaged in discussions about the goals that were being targeted with the children, activities that were being implemented to accomplish them, problem-solved next steps and/or concerns, participated in classroom activities, and brainstormed resources. Parents played a key role in identifying family strengths and challenges. This was integral in determining whether activities should be introduced or purposefully omitted from individual and/or group lesson plans (e.g., sensory items, specific songs, particular augmentative/alternative strategies, core vocabulary, snack items, gross motor activities). Further, caregivers were encouraged to communicate among themselves, support one another, and share experiences and resources. In this way, parents were encouraged to consider themselves as valued members of the team with on-going opportunities for their voices to be heard.

Consistent with education and health professions university-degree programs, students engage in clinical practica and field-based experiences. Students who chose to enroll in the iSLP experience expressed an interest in working with young children and families in a group setting. Throughout this interprofessional education experience, students were required to rotate roles and responsibilities (e.g., activity planning and set up, data collection, daily documentation, in-classroom participation/treatment, participate in observation room/caregiver communication) and were expected to communicate regularly with all team members, including caregivers. At the conclusion of each clinical session, students and faculty met to review the challenges of the day, as well as celebrate successes. Topics of discussion included, but were not limited to, children's daily outcomes, caregivers' questions, concerns, and confirmations, and IPE/IPP daily outcomes. On-going and consistent emphasis was placed on encouraging caregivers to participate in and initiate discussions with team members, as this level of engagement serves to support the child as well as elevate the family system [1,2,7].

## Method

### Program Evaluation Design

Program evaluation may incorporate the use of qualitative methods to effectively clarify and obtain a deeper understanding of the patterns associated with a specific structure or event. Strauss and Corbin [17] expanded this idea by stating that qualitative methods could be used to examine new phenomena and gain new perspectives and in-depth information on matters that may be difficult to communicate quantitatively. Qualitative evaluation provides a means to examine the intricacies of societal dynamics by integrating personal experience to understand the functioning of behavior. For the current programmatic evaluation, the exploration of participant perception through qualitative methodology illustrates how first-person accounts reveal key components within the iSLP.

### Participants in the evaluation process

When program evaluation interviews were conducted, four children had successfully completed iSLP and transitioned into a community-

based preschool program. The caregivers of these four children were contacted by the iSLP coordinator and were invited to participate in this assessment activity. During this initial contact, the coordinator gave no indication and/or preference as to who the participant(s) should be, given that various family members observed the child during iSLP (e.g., the mother, father, both parents, and/or grandparent). This decision was left to the family. The respondent for each of the four families was the mother. All mothers had consistently, actively engaged in the iSLP process along with their child. The mothers were Caucasian, married, and monolingual. The families were considered middle to upper middle class. One of the four mothers worked outside the home, the other mothers were the primary caregivers during the day.

### Evaluation procedure

Program evaluation data was collected via semi-structured, face-to-face interviews conducted by graduate and undergraduate students enrolled in a CSD program, using a script of open-ended questions. These students had not participated in the iSLP practicum at the time this evaluation data was collected. The 45-60-minute interviews took place at a location chosen by the parent participant (i.e., either the family's home, the university clinic, or a public place of the parent's choosing). Prior to conducting the evaluation interviews, parents read and signed an informed consent. This procedure was completed to assure parents their participation in this assessment activity would not affect their relationship with the iSLP program or the university. This procedure was approved by the University Internal Review Board.

The purpose of the interviews was to gain information about the parents' thoughts and feelings about their experience with participating in iSLP. The interview questions (Appendix) were designed to gather first-hand accounts of how parents' experienced interacting with professionals and students from multiple disciplines during the intervention process, their overall satisfaction with the process, and suggestions for improving the program to better serve children and families in the future.

The interviews were recorded and transcribed by graduate and undergraduate students. The students conducting the interviews were not participants in the iSLP at the time these families were enrolled. This strategy was meant to afford parents the greatest transparency in their responses without concern that they might offend a student with whom they had interactions during the iSLP experience. The transcriptions were coded independently and all identifying information was removed. Students reviewed a portion of other students' transcriptions for accuracy. Reviews were completed until an agreement on content could be achieved.

### Program evaluation data analysis

Transcriptions were analyzed using QDA Miner Lite. QDA Miner Lite is a qualitative data analysis software designed to organize, code, and analyze documents or images [18]. Original transcripts were transformed into word documents which were then uploaded into the QDA Miner Lite software. Each document was examined for recurring words or phrases related to participants' responses to interview questions. Once identified, these were highlighted and annotated. Initially 129 unique codes emerged, which were collapsed into 2 categories, and eventually into 4 themes.

### Results

The purpose of this program evaluation was to provide a first-hand accounting of parents' perceptions of the iSLP experience and

**Table 1.** Themes from Parent Perceptions of iSLP Program

Process Oriented	Product Oriented
Programmatic Processes <ul style="list-style-type: none"> <li>• Nature of the program design               <ul style="list-style-type: none"> <li>o Including parents on the team (e.g., voice, trust, parent to parent)</li> <li>o Faculty and student interaction (e.g., multiple disciplines)</li> <li>o Children's experiences (e.g., peer interaction; snack)</li> </ul> </li> </ul>	Impact of iSLP on family <ul style="list-style-type: none"> <li>• Change in family skills</li> <li>• Change in family emotional state</li> </ul> Impact of iSLP on child <ul style="list-style-type: none"> <li>• Change in child skills</li> </ul> Change in beliefs about child <ul style="list-style-type: none"> <li>• Parent's perception of child</li> </ul>

provide an overview of the theoretical and evidence base underpinning the structure of the program. The focus of this section is to provide details focused on the results pertaining to the qualitative analysis of the interview transcripts. This process resulted in the emergence of 2 categories and 4 themes (Table 1). Responses were identified as pertaining to either process or product-oriented factors. Process-oriented was operationalized as those elements that were programmatic in nature, such as relating to the structural components of iSLP. Product-oriented was operationalized as being comprised of those features emphasizing the impact of the iSLP experience on their family, their child, or the caregiver's beliefs about their child. Each theme is described in further detail, including using participant quotations as supplementary supporting evidence.

### Process-Oriented

#### Programmatic processes

**Nature of the program design: Including parents on the team.** Parents overall assessment of the program structure and the nature of the iSLP process was positively reflected in their comments about having a 'safe' environment in which to express concerns, observe and ask questions, and develop a network with other parents and the professional members of the team. One mother commented, "that having the other parents back there" and "that having the camaraderie was really beneficial." A mother also summarized her experience by stating she found the experience "relieving...that other people have experienced this and are experiencing this." She continued by stating, "being able to talk to (faculty names) was helpful" and "I felt like okay, I'm not—like there are resources and I am not alone in trying to figure this out." These mothers provided support for the idea that caregivers appreciate being included as a member of the treatment team.

**Faculty and student interaction.** All mothers discussed the benefits of having various disciplines working collaboratively with their child. They noted that it increased their understanding of how development is interconnected. One mother said, that having "occupational therapy and physical therapy there was a really important part" of the program. She stated that she had not been aware of her child's sensory needs and that she "learned a lot from the occupational therapist." Another mother noted that she "liked having the faculty back there with us." She also said that she appreciated that they would "talk us through and give us suggestions on what we could use during the week – it just gave us lots of tools."

Mothers also indicated they enjoyed having access to the observation room and how this facilitated interactions with other parents and with iSLP faculty. One mother stated, she "really appreciated being in the observation room and being able to converse with the faculty and different students." She enjoyed being able to discuss "things that were working and ways to extend the activities and learning at home."

**Children's experiences.** The iSLP program also provided specific experiences to the children enrolled that afforded them the opportunity



to participate in activities that were functional and meaningful to families. One mother noted, that she “really thought the snack time was beneficial because he would be eating a snack but would also have to communicate with the people right across the table from him which is something every day, very common eating snacks.” Another mother remarked, “I mean, it’s changed his future and my future too because he gets to play with his sister...so that interaction, the peer-to-peer is great for him.”

## Product-Oriented

### Impact of structure on child

**Change in child skills (general).** Mothers were asked to reflect on the effect iSLP had on their child. All mothers spoke about the confidence they felt their child had gained and the majority indicated a change in their child’s communications skills (i.e., vocabulary, the ability to say what they wanted/needed), as well as an increase in social skills and the ability to interact with others. A mother said that her son’s “sensory type things got better, his PT got better, his speech got better, his social skills got better. Everything just kind of got better, it was really great!” She also noted that they “tried to get him all sorts of sensory stuff at home.” One mother stated, “A big outcome was that she would just tell me what she wanted and needed, which she does quite well now. By the end of that year she had gotten to a place where I didn’t have to guess so much anymore.” Another mother remarked that “It showed me how bright he was and that he had the ability to have positive social interactions. He could pretty much be a normal child.” Finally, an additional mother noted, “I definitely feel like (child’s name) gained confidence...she gained confidence in her speaking, so she was willing to try a little bit more to express herself.”

**Change in child skills (preparation for 3-year-old program).** One purpose of iSLP was to support the children enrolled by helping them develop skills that would lead to their successful transition to a 3-year-old preschool program in their local school district. Mothers were asked how they believed iSLP prepared their child for this transition. All the mothers indicated that attending iSLP had a positive effect on their child’s ability to be successful in the 3-year-old preschool program. Mothers indicated that iSLP helped the children know how to manage a classroom routine and that iSLP provided the children with the skills they needed to be successful. One mother stated, she was “glad that she completed iSLP before enrolling him in pre-K” and that “it 120% prepared him for pre-K. It gave him the range of abilities he needed.” Another mother said, “He needed the extra push for pre-K, and iSLP gave him that. Success in iSLP carried over to pre-K.” Finally, a mother remarked, “If we hadn’t have done this and just sent him off to preschool, he wouldn’t have swam like he has now, you know what I mean? It just was kind of like the training wheels that he needed before he was ready to go on to other things.”

### Impact of iSLP on family

**Change in family skills.** All mothers reported a change in their own, and other family members’, knowledge and skills as a result of iSLP. Mothers remarked how the structure of the program, including the ability to learn from professionals representing multiple disciplines, facilitated opportunities to learn new strategies that they could use at home with their child. One mother stated, “I have more tools in my tool belt to work with if he is struggling sometimes.” She noted she implemented a strategy called, “a visual schedule” in their home. She elaborated by saying it “was kind of nice, because then he knew what to

expect and what was coming.” She also noted they used social stories to better explain and prepare him for upcoming events.

Mothers also acknowledged positive changes in family interactions because of iSLP. They indicated that as their child’s language expanded so did their interactions among family members. One mother commented that the experience was “really positive.” She felt “it was a good learning experience for everybody.” She also remarked how it was beneficial it was for her family, “We got to help our son, which helped our family.”

### Change in belief about child

**Parents’ perception of the child.** All mothers commented that the iSLP experience changed the way they viewed their child. They spoke about a positive shift in their perspective about their own perception of their child’s behavior, skills, and their child as an individual person. Mothers also spoke about the positive impact the program had on their child’s future. They noted that because of the iSLP experience they now have fewer concerns and are confident their child will grow up like a typically developing child. One mother remarked, “I came away with a whole new set of eyes.” She also shared that before the program she would think, “Why is he being like this?” and, that “he is being a bad kid.” “Now”, she said, “it was easier to put it in a neutral light and not blame him.” Another mother stated that her view for her son’s future “changed more than we thought.” She said, “It’s changed his future and my future too, because he gets to play with his sister.” She continued by saying she worries less about them not getting along and that recently her son shared his dream of becoming an “animal doctor.” She was thrilled he aspired and believed in this goal, saying, “Maybe he will be a doctor someday.” Finally, one mother expressed her joy for the future she sees for her son with these words, “The future I see for my child right now is just like any other typically developing child.”

## Discussion

Caregivers expressed concern for their young children as they prepared to enroll them in a 3-year old preschool program. University faculty responded to this need and designed a program that was collaborative, interprofessional, and family centered. Mothers who participated shared feedback about the experiences during their time in iSLP through semi-structured interviews conducted for the purpose of obtaining program evaluation data. Qualitative analysis of comments obtained during these interviews revealed that the mothers appreciated the design of the program and enjoyed the interprofessional nature of the classroom. The family-centered framework afforded caregivers opportunities to learn with and from professionals as they provided intervention for their children and to have open, honest exchanges with all members of the team [9]. Mothers also indicated a perceived benefit from being able to observe their child in the company of the faculty-coordinators of the program. This provided them with on-going guided observations, strategies to use in the home, and opportunities to have their questions answered [2,8]. They appreciated how the classroom was structured, because children had multiple opportunities to be successful when interacting with others and developing skills from multiple domains (e.g., sensory, social, and communication) [1]. Further, they expressed perceptions that the structure of the classroom helped their child gain confidence and improve their social and communication skills. Their perspective reflects what is reported in the literature: interprofessional collaboration, including parents as valued members of the team, results in improved outcomes for both the child and the family [1,2,7]. Further, it has been reported that families appreciate and trust professionals’ insight and recommendations when they work collaboratively on behalf of their loved one [4,9].

Parents expressed appreciation for the positive outcomes that occurred during their time in iSLP. Parents believed that their child's future was brighter than they had originally anticipated. They also felt confident that their children were better able to engage in a preschool program. Many parents discussed how the skills the children had developed improved their ability to relate to their child; and, in turn, the child's ability to relate to other members of their family. This perspective is consistent with reports in the literature by parents who have worked collaboratively with their child's intervention team [4].

Mothers shared that the iSLP program had a positive effect on their family system. They supported this by saying they had learned to use tools and strategies they could implement in the home. Using these tools increased opportunities for the child to communicate with the whole family, including siblings, during family conversations. Further, it helped reduce worry and increase confidence that their child would be successful and develop more typically. It even allowed the parents the opportunity to dream about what their child's future might hold and prepared them to advocate accordingly [1,2]. As reported by Furgeson, *et al.* teamwork and shared values helps to create a positive, safe environment. This type of intervention culture serves to create a safe and productive environment for children and families.

When examining the mothers' comments, it was evident that mothers felt safe in expressing their views regarding the processes and products associated with the iSLP experience. They openly commented on their fears, expectations, and reflections regarding their children and their anticipations. Engaging in open communication is considered a reflection of the mothers' trust and their feeling that their voices were heard and valued by the professional members of the team. These on-going interactions among professionals, students, and caregivers throughout the iSLP experience helped mothers normalize the process of sharing information about their children and the family. In doing so, it normalized active participation, and solidified their position as essential members of their child's team. Further, this on-going engagement placed mothers in both the teacher role (i.e., helping others be better informed about their child) and learner role (i.e., seeing the child from different perspectives); serving to create the relational and participatory components deemed essential for the facilitation of empowerment [7]. As Todd and Jones [9] reported, this is especially critical during times of transition when families may experience disruptions in services and/or personal life. Evidence of this is reflected in mothers' perceptions of how the program facilitated their own growth and sense of empowerment. Throughout their involvement in the iSLP, their expertise regarding their child was valued and enhanced as a result of their inclusion on the intervention team.

It is worth noting that the interviews did not specify what family member(s) would participate in evaluating the program. That all interviewees were mothers is not to conclude that only mothers attended the sessions. As the program progressed, mothers invited other members of the family (e.g., grandparents and extended family members) to observe the sessions. This is noteworthy, because it further reflected mothers' positive perceptions of the program and their children's progress. Mothers began to view their children more positively and wanted to share that with other members of the family system. Professional members of the team commented that even the way mothers dressed their children and interacted with them in the clinic waiting areas changed during the course of the program, noting the children's appearance was more consistent with what is 'typical' for children in public settings.

As documented in the literature, children with complex needs benefit from interprofessional care and parents express appreciation and pleasure when team members collaborate and include them as valued members of the child's care team [1]. As faculty reflected on the responses mothers provided during their program evaluation interviews, it appeared that the attention faculty gave in designing the iSLP program helped mothers realize the progress that had occurred for the children, as well as the family system. Perhaps this offers a different viewpoint for professionals to consider when developing early intervention programming. It challenges us to be intentional about discussing the process that has been put in place with all members of the team, including families. Caregivers should be encouraged to recognize the role they play in advocating for their child and their family. However, to do this, caregivers must be given on-going opportunities to express their concerns, ask questions, and give input to the professionals working with their child.

## Conclusion

The program evaluation data provide evidence that parents perceived the iSLP to have positive outcomes for their child, themselves, and their family. Despite the limited number of participants involved in the programmatic review, results lend support to the literature that documents the value and positive effects of interprofessional practice on child and family outcomes. Further, it extends the literature that provides caregivers' first-person perspectives on the processes and products that impact children and families as a useful form of program evaluation [5,6]. Based on the results of this evaluation, the university faculty will continue to explicitly focus on strengthening IPP/IPE processes within the iSLP. Efforts will focus on providing caregivers and student clinicians with on-going evidence and experiences that emphasize the relevance and importance of including caregivers on IPP/IPE teams. In so doing, pre-professionals will be better prepared and motivated to act accordingly when they become practicing professionals and members of IPP teams [1].

## Conflict of interest

We have no known conflict of interest to disclose.

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