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Karmen Porter Ph.D. Fort Hays State University, klporter@fhsu.edu

Janna B. Oetting Louisiana State University at Baton Rouge

Loretta Pecchioni Louisiana State University at Baton Rouge

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1	Caregivers' Perceptions of SLP Talk about Child Language and Literacy Disorders
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3	Karmen L. Porter (Corresponding Author)
4	Department of Communication Sciences and Disorders
5	Fort Hays State University
6	Hays, Kansas
7	(785) 628-4453 (office)
8	klporter@fhsu.edu
9	
10	Janna B. Oetting
11	Department of Communication Sciences & Disorders
12	Louisiana State University
13	Baton Rouge, Louisiana
14	
15	Loretta Pecchioni
16	Department of Communication Studies
17	Louisiana State University
18	Baton Rouge, Louisiana
19	
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Abstract

Purpose: This study examined caregiver perceptions of their child's language and literacy 25 disorder as influenced by communications with their speech-language pathologist (SLP). 26 Method: The participants were 12 caregivers of 10 school-aged children with language and 27 literacy disorders. Employing qualitative methods, a collective case study approach was utilized 28 in which the caregiver(s) of each child represented one case. The data came from semi-structured 29 interviews, codes emerged directly from the caregivers' responses during the interviews, and 30 multiple coding passes using ATLAS.ti software were made until themes were evident. These 31 32 themes were then further validated by conducting clinical file reviews and follow-up interviews with the caregivers. 33 Results: Caregivers' comments focused on the types of information received or not received, as 34 well as the clarity of the information. This included information regarding their child's diagnosis, 35 the long-term consequences of their child's disorder, and the connection between language and 36 reading. While caregivers were adept at describing their child's difficulties and therapy 37 goals/objectives, their comments indicated that they struggled to understand their child's disorder 38 in a way that was meaningful to them and their child. 39 40 **Conclusions:** The findings showed the value caregivers place on receiving clear and timely diagnostic information, as well as the complexity associated with caregivers' understanding of 41 language and literacy disorders. The findings are discussed in terms of changes that could be 42 43 made in clinical practice to better support children with language and literacy disorders and their families. 44

45

Key words: caregivers, SLP communication, language disorders, literacy disorders, diagnostic
labels, dyslexia, SLI, DLD

48

49	Caregivers' Perceptions of SLP Talk about Child Language and Literacy Disorders
50	As professionals who diagnose, treat, and support individuals with communication
51	disorders and their caregivers, speech-language pathologists (SLPs) must frequently
52	communicate with clients and their caregivers in a manner that encourages trust and
53	collaboration (ASHA, 2004; 2005; Hand, 2006; Walsh, 2007). However, practices that truly
54	integrate client values and encourage collaborative decision making require mutual
55	understanding among all parties (Berger, 1997). In the context of speech and language
56	assessment and intervention, effective SLP communication requires not only communicating
57	clearly, but also seeking to understand how the communication is received and interpreted.
58	A growing number of studies have focused on the communication practices of SLPs (e.g.,
59	Burns et al., 2012; Ferguson & Armstrong, 2004; Fourie, 2009; Hand, 2006; Hengst & Duff,
60	2007; Hester & Stevens-Ratchford, 2009; Leahy & Walsh, 2008; O'Malley, 2011; Simmons-
61	Mackie & Damico, 2009, 2011; Stone, 1992; Stoner, et al., 2006). For example, Simmons-
62	Mackie and Damico (2009) explored how a clinician's communication practices can encourage
63	group member engagement in aphasia groups, and Stone (1992) presented two case studies
64	illustrating how changes in clinical interactions can influence the clinician-client relationship. A
65	common theme across these studies is that SLPs must think about how they build relationships
66	with clients and not just what kind of evaluation or treatment approach they are providing. While
67	these studies provide a good start to the discussion, none directly examined how SLPs share
68	information with clients/caregivers, or how the clients/caregivers perceived the communication
69	practices of SLPs. Client/caregiver perspectives are a key component of evidence-based practice
70	(EBP) – a practice that requires the integration of known research, clinical expertise, and client
71	perspectives in the decision-making process (Hidecker et al., 2009). Given this, the lack of

studies examining the perspectives of client/caregivers constitutes a significant gap in theliterature and hinders the application of EBP.

One recent study by Ash, et al. (2020) did explore caregivers' understanding of their 74 children's language disorders, as well as the role SLPs played in developing their knowledge. 75 Results indicated that caregivers' perceptions of their SLPs were not always positive, especially 76 when they felt they were not given sufficient information or information that was too complex. 77 These results resonate with previous studies that show satisfaction in healthcare to often be tied 78 to perceptions of the providers' communication (e.g., Brown et al., 2003; Donovan et al., 2005; 79 Propp et al., 2010; van Zanten, et al., 2007; Wanzer et al., 2004). For example, Wanzer et al. 80 (2004) found a strong positive relationship between the amount of communication behaviors 81 perceived by the patient to be patient-centered and the patient's overall satisfaction with the 82 medical care their children received. Furthermore, Ash et al.'s (2020) results remind us that 83 sharing information does not always mean it is understood. In another study, caregivers' 84 understanding of children's growth charts were examined (Ben-Joseph et al., 2009). Although 85 64% of the caregivers surveyed believed doctors should use charts to show them how their child 86 was growing, only 8% correctly interpreted a set of hypothetical charts showing children's 87 heights and weight. Studies by Ash et al. and Ben-Joseph et al. illustrate the importance of 88 further examining caregiver perceptions of SLP communication behaviors, as well as the need to 89 identify communication strategies that clients/caregivers consider effective. 90 91 To better understand the client/caregiver's perspective, it is also important to recognize

better understand the chent/caregiver's perspective, it is also important to recognize
the role of family systems. Per family systems theory, individuals exist within a larger
interdependent system of family and community that influences how one perceives messages
from other individuals. Thus, to communicate effectively with caregivers, SLPs must be

sensitive to the role of previously established family attitudes and beliefs in the caregiver's
interpretation and understanding of the communicative interaction (Pecchioni & Keeley, 2011).
The level of understanding and clarity required to establish a productive relationship varies
depending on the client/caregiver's age, needs, and desire for information. However, having an
appropriate knowledge base of the communication disorder being treated is an important first
step for the client/caregiver and SLP to be able to engage in an effective collaborative
relationship (Crais, 2006; Woods et al., 2011).

102 Childhood Language and Literacy Disorders

103 Children with language and literacy disorders present with complex linguistic profiles. When children are young, their profile is often characterized by weaknesses across semantic, 104 morphosyntactic, narrative, and phonological skills, and as they age, their profile can evolve to 105 106 include weaknesses in literacy (Leonard, 2014; Paul et al., 2017; Schwartz, 2017). Even children who appear to recover from early language delays, such as late talkers, are more likely to 107 encounter difficulties upon entering school and beginning formal reading instruction (Rescorla, 108 2002; Scarborough, 2001). Relationships between children's early oral language disorders and 109 later literacy disorders are not surprising as many oral language abilities have been found to be 110 essential for supporting reading, writing, and spelling (Seidenberg, 2018). As with oral language 111 disorders, there is heterogeneity in children's literacy disorders. Even when the focus is on 112 reading disorders only, some children demonstrate poor reading comprehension, others present 113 114 with poor word decoding, and still others present with difficulties in both areas. (e.g., Adlof & Hogan, 2018; Catts et al., 2005; Catts et al., 2006; Catts, Fey, Tomblin, & Zhang, 2002; Saletta, 115 2018). Children classified as poor comprehenders consistently present with weak oral and 116 117 written language skills in comparison to their peers with typical reading skills. Still, many are not

identified as impaired until they begin to struggle with formal reading instruction (Petscher et al., 118 2018). Children who demonstrate good comprehension skills, but struggle with poor word 119 recognition skills, are often identified as poor decoders, or children with dyslexia (Alt et al., 120 2019; Catts et al., 2003). They also may not be identified until their difficulty with reading and 121 spelling becomes apparent, as they often present with standardized oral language scores within 122 the typical range. However, studies show that as a group, poor decoders (8-9 years) are still 123 likely to perform below their typical peers on oral and written language tasks, suggesting that as 124 whole, language skills are an ongoing concern for all children with literacy disorders (Adlof & 125 126 Hogan, 2018; Saletta, 2019).

Given this, when children present with a language and literacy disorder, the SLP must 127 determine the best information to share with caregivers. The applicable information may vary 128 129 depending upon the child's particular linguistic profile, the child's age, the newness of the diagnosis for the caregivers, and the SLP's understanding of the caregivers' knowledge about 130 children's language and literacy disorders. Further complicating the SLP's communications with 131 caregivers are the many diagnostic labels that are used to describe these children's 132 psycholinguistic profiles, including but not limited to receptive and/or expressive language 133 134 impairment, developmental language disorder, and specific language impairment for oral language deficits (Bishop et al., 2017; Leonard, 2014; Paul et al., 2019; Rice & Warren, 2005; 135 Schuele & Hadley, 1999; Van Horne et al., 2018; Volkers, 2018) and learning disability, 136 137 dyslexia, reading comprehension deficit, and mixed reading disorder for reading deficits (Catts et al., 2006; Dollaghan et al., 2012). The work setting (e.g., school, rehab center, early intervention) 138 or function being served by the label (e.g., billing, diagnosis vs. eligibility, qualifying disability 139 140 for individualized education plan [IEP]) also influences the SLP's communication practices with

caregivers (American Psychiatric Association, 2013; IDEA 04; ICD-10-CM/PCS: World Health
Organization, 2015).

143 **Purpose and Research Questions**

The purpose of the current study was to learn more about how SLP communication is 144 perceived by caregivers of children with language and literacy disorders. Relatively few studies 145 in the literature have examined the interpersonal practices of SLPs who work with children, and 146 only one study by Ash et al. (2020) focused on how SLPs communicate with caregivers about 147 childhood language disorders. The EBP process requires that SLPs integrate not only clinical 148 149 expertise and research evidence, but that they also consider client values and perspectives. This study will add to what SLPs know about how caregivers of children with language and literacy 150 disorders perceive their communicative experiences with SLPs, and provide a framework for 151 152 enhancing SLP awareness of their own professional communication strategies.

As an exploratory study, no specific aspect of SLP talk was specifically targeted. Instead, this study employed a qualitative research design, and sought to discover from the caregivers what types of information they recalled receiving from SLPs regarding their child's language and literacy disorder, and how they understood and interpreted that information. The following research questions were addressed:

What information do caregivers describe receiving from SLPs regarding their child's
 language and literacy disorder?

160 2. How do caregivers describe their understanding of their child's language and literacy161 disorder?

162

163

Methods

The study was approved by the Louisiana State University Institutional Review Board 165 and the Fort Hays State University Institutional Review Board. Consent was obtained from all 166 participants prior to the study. In addition, the Consolidated Criteria for Reporting Qualitative 167 Research (COREQ) was used as a guide for reporting methodology and results (Tong, Sainsbury, 168 169 & Craig, 2007).

Participants 170

Participants were caregivers of a school-age child diagnosed with a language and literacy 171 disorder and who had been evaluated at a Midwestern university clinic within the past $1 - 1\frac{1}{2}$ 172 years. All participants were native English speakers, part of the household in which the child 173 primarily or jointly resided, and active in decisions about the child's care/education. At the time 174 of the study, ten families connected with the clinic met these criteria, and 12 caregivers from 175 these families agreed to participate. Eight family units consisted of one primary caregiver 176 participating in the interview and two family units consisted of two caregivers participating (one 177 set together and one set in separate interviews). All caregivers were White/Caucasian and came 178 from a variety of educational and occupational backgrounds, with four working in healthcare 179 related fields and two having or working towards education degrees (see Table 1). Each 180 caregivers' level of experiences with SLPs varied, ranging from one experience with an SLP at 181 the university clinic to multiple experiences over time with early intervention SLPs, school-182 183 based SLPs, and university clinic SLPs. As Table 2 delineates, each child's path to being diagnosed with a language-based literacy disorder varied depending on the initial presenting 184 concerns. For example, one caregiver worked with several educators and special educators at her 185 186 child's school, but never communicated with an SLP about her daughter's reading difficulties

until she was referred to the university clinic. In contrast, another caregiver whose child
presented with communication concerns early on, communicated with several SLPs over the
years as her child transitioned from early intervention services, to pre-school services, and to
school-based services, before she sought out additional services at the university. Despite these
differences, each caregiver had the common experience of having a child with a diagnosed
language-based literacy disorder.

The participants' children ranged from 8 to 16 years (see Table 3). Each child's 193 developmental history and diagnosis was obtained from the university clinic report. Three of the 194 195 participants were identified as late talkers and had received early intervention services. The remaining seven were identified as they began to have difficulties in school with reading and 196 spelling (two had a documented IEP) prior to their evaluation at the university clinic, one had 197 participated in title one reading services, and four were in the process of qualifying for either IEP 198 or 504 services). All were enrolled in school (8 public; 1 private; 1 homeschooled) and had a 199 documented language-based literacy disorder from the university clinic evaluation. Six of the 200 children received individual or group intervention services for varying periods of time from the 201 clinic; and at the time of the interviews, all children were receiving services from either the 202 203 university clinic, their school, or both to address their language and literacy difficulties. While the children and adults in this study were heterogeneous in nature, each of their caregivers had 204 one or more experiences receiving information from an SLP about their child's language and 205 206 literacy disorder.

207 **Procedure**

Following the methods of previous qualitative studies, the data were collected via semistructured participant interviews (e.g., Angell et al., 2009; Ash et al., 2020; Fourie, 2009; Fourie

et al., 2011; Lyons & Roulstone, 2018; Shelden et al., 2010). Unlike online questionnaires or
surveys, the semi-structured interview allows the examiner to ask follow-up questions to check
for understanding and interpretations of meaning with participants (Kvale, 1996). Each interview
represented a single unique case, which was then examined collectively to better understand
what was common across caregiver experiences and perspectives (Stake, 2005).

215 Interviews

All semi-structured interviews were conducted in person (university clinic = 4, 216 caregiver's home = 7) by the first author, an experienced SLP and clinical educator within the 217 218 university clinic. For all but three interviews, only the first author and the participant(s) were present. For two interviews, a female graduate student was present with the participants' 219 permission, and for one interview, the participant chose to answer questions in her living room 220 221 while watching children in her care. Beyond clinical expertise in the area of language and literacy disorders, the first author, a PhD student at the time of the interviews, had completed 222 course work in qualitative methods and health communication studies and conducted a pilot 223 study using semi-structured interviews with caregivers from a different university clinic (Porter, 224 2013). Three of the family units were minimally known to the first author prior to the study 225 through contact within the clinic; the others were solicited through the university clinic. 226

During the interview, caregivers were asked questions regarding their child's speechlanguage evaluation(s), their conversations with their SLP regarding the evaluation results, their understanding of the written report(s) they received, and their impressions of their child's current status, as well as their hopes for the future. As each interview was conducted, the interviewer made requests for clarification or additional information as necessary (e.g., "so you are saying, if somebody reads a story to him he seems to be able to comprehend it"). First author observations

and notes were made throughout the interview process, and all initial interviews were audio
recorded and transcribed verbatim to ensure accuracy of the provided information. The
interviews ranged from 30 to 70 minutes in length.

236 *File Reviews*

Per caregiver consent, the first author also reviewed each child's university
file/documents. This consent allowed the first author to review previous evaluations, reports, and
progress notes, as well as demographic and social information. The files served primarily as a
source for data verification.

241 Follow-up Interviews

Follow up interviews with nine of the original participants took place a few months 242 following the initial interview. Caregivers were provided a written transcript of their initial 243 interview prior to the follow up interview and were asked to review it. During the follow up 244 interview, the first author asked any follow up questions that were needed, shared basic themes 245 or ideas that had stood out in a caregiver's interview, and asked the caregiver(s) to provide any 246 additional information they would like to share. The follow up interviews lasted 15 to 30 minutes 247 and were conducted either in person or on the phone. The follow-up interviews were not 248 transcribed. 249

250 Data Analysis

To ensure reliability of the transcripts, each transcript was reviewed three times, two times by two different graduate students, and one time by the first author. Additionally, the first author took notes during and after each interview, documenting observations of the participants and overall interactions. The research questions drove the analysis, leading the first author to focus on caregiver references to how they perceived SLP communication regarding childhood language and literacy disorders. The analysis consisted of three general phases, including data
condensation, data display, and conclusion drawing/verification (Miles, Huberman, & Saldana,
2014).

Data condensation included the first author's process of selecting, simplifying, and 259 transforming the obtained data. This phase involved creating and assigning codes to the 260 caregivers' responses to identify categories and themes within the data. Using the qualitative 261 program ATLAS.ti (www.atlasti.com), the first author reviewed each transcript, creating both 262 codes that emerged from the caregivers' comments (e.g., poor memory, focus on speech) and 263 264 codes that related to the literature review (e.g., diagnosis, long-term outcomes, oral languagereading connection). After reviewing each transcript, over 150 codes were created. Then, the first 265 author narrowed these codes down to 59 (see Appendix B) through merging repetitive codes and 266 deleting codes that did not directly relate to the research questions. To ensure reliability of the 267 coding process, a graduate student was trained in the process of adding codes to the transcripts 268 and given $\sim 10\%$ of the coded transcripts, as well as a list of the 59 codes. The first author's 269 coding and the student's coding reached a satisfactory level of agreement achieving a Cohen's 270 kappa of .84 (95% CI, .76 to .91), p < .001. Items on which the coders disagreed were discussed 271 272 between both coders until agreement was reached.

The data display phase made use of the ATLAS.ti network feature. Specifically, the first author used this software to visually display and examine connections between codes and adjust categories both within and across transcripts (see Figure 2). Using the networking feature, the first author identified several general themes that consistently presented themselves across the caregivers. Six of those themes are presented here as they were the most pertinent to the research questions.

279	Finally, to draw conclusions and verify the conclusions, the first author utilized two
280	strategies: triangulation and member checking (Miles, Huberman, & Saldana 2014).
281	Triangulation involved obtaining multiple independent measures, including audio recordings and
282	transcripts of each interview, detailed notes from the interview sessions, and reviews of each
283	child's clinical file. With triangulation, several of the caregivers' responses suggested
284	overlapping and consistent experiences and feelings, and the inconsistent or conflicting
285	experiences shared by a caregiver(s) tended to reinforce the general perceptions rather than
286	weaken them. For example, a negative experience with descriptions of what did not happen (e.g.,
287	no diagnosis was given) tended to strengthen the importance of what did happen when the
288	experience was a positive one (e.g., a clear and understandable diagnosis was given).
289	Member checking occurred through confirming the first author's conclusions with the
290	study participants. The first author did this by regularly checking for understanding throughout
291	the interviews, restating participant comments, and directly asking participants to confirm the
292	first author's interpretation of their comments. As noted earlier, the first author also set up
293	follow-up interviews with the caregivers. All who participated in these interviews indicated
294	agreement with the demographic information collected, the accuracy of the transcriptions, and
295	the first author's interpretation of their interview responses. Four of the caregivers added
296	additional details that they had recalled after reviewing the transcript.

297

Results

When examining the caregivers' interviews, several key themes emerged that related to the type and quality of information they received from the SLPs (Research Question 1) and their understanding of their children's language and literacy disorders (Research Question 2). All caregiver responses were aggregated across experiences. While experiences varied and

caregivers with more frequent experiences communicating with SLPs were often able to provide 302 a more historical perspective than others, as well as more comparative examples over time that 303 highlighted key perceptions, the general themes identified in this study were consistent across 304 participants. Moreover, when caregivers presented a unique experience related to an SLP 305 interaction, that interaction often did not relate to the research questions. For example, one 306 307 caregiver was raising another child with Autism, and another was the primary caretake for her brother with special needs. Due to these familial relationships, both had previous experiences 308 interacting with SLPs. Nonetheless, individual differences across caregivers did not contradict 309 310 the general agreement found across participants in describing their perceptions of SLP communication in the context of their child's language-based literacy disorder. 311

312 Information Caregivers Reported Receiving from SLPs

As a whole, caregiver perceptions of SLP communication focused on the types of information they received or did not receive and the clarity and understandability of the information given. In examining what information caregivers recalled receiving from SLPs, three overall themes emerged: caregivers valued a diagnostic label, information given about long-term consequences was lacking, and caregivers equate the quality of their experiences with their perception of the quality of information shared.

319 *The Value of a Diagnosis*

From the caregiver's perspective, the diagnosis was the most sought-after information.

321 When asked what information had been shared with them, caregivers universally focused first on

322 whether or not they had received a clear diagnosis.

323 "They [SLP team] said she definitely had dyslexia." (Mrs. G)

324 "I don't remember a degree being given at that point in terms of mild, moderate, severe
325 but I remember it being dyslexia is what we [SLP team] are looking at here." (Mrs. C)

326 327	"They would not label himit was just oh well he might have this issue." (Mr. B)
328 329	"There was never - I don't think any - and I still don't know that I know for sure what." (Mrs. D)
330 331	Whether they believed they had or had not received one, caregivers emphasized the importance
332	of a diagnosis. As Mrs. G put it, "as a parent you want to know."
333	The reason the diagnosis was so valuable varied among caregivers. For Mrs. A, the
334	diagnosis validated her concerns.
335 336 337 338 339	"I got the paperwork saying you know this is the level she's at, and I really liked seeing that because we knew she was low but at least we had it documented. We have family members that aren't accepting this whole thing, and so it's black and white and here it is."
340	For Mrs. C, a diagnosis meant access to resources she had been seeking.
341 342	"Having a diagnosis, I was able to walk into a new school and show them, and there was no longer a fight. It was ok, this is what we need to do."
343 344	Even when a diagnosis was given though, it did not ensure that it was understood, especially if
345	the label was unfamiliar to the caregiver. Dyslexia was the most commonly identified diagnosis
346	by caregivers. The five caregivers whose children received a dyslexia diagnosis (and had the
347	label dyslexia in the report) all recalled and reported the diagnosis of dyslexia accurately,
348	suggesting that they felt comfortable with the label. In contrast, the second most common
349	response caregivers gave when asked about their child's diagnosis was "I still don't know". Four
350	caregivers of the children who received a more complex diagnosis (e.g., mixed reading disorder,
351	reading comprehension deficit) demonstrated a lack of awareness of the given diagnosis or
352	reported conflicting diagnoses. For example, Mrs. F, who was unsure about the overall diagnosis
353	tried to recall the report, "I know there's something in there about the dyslexia." However, per
354	the speech and language report, her daughter "exhibits a reading comprehension deficit

355	characterized by difficulty recalling information from a text, answering questions, and
356	incorporating important details." No mention was made of dyslexia in the report.
357	It was also notable that multiple caregivers did not consider a "speech and/or language
358	delay" a diagnosis. Three caregivers in particular, whose children had received early intervention
359	services elaborated on this idea.
360 361	"No I don't think he was diagnosed with anything at the time Just a delay in speech and language" (Mr. & Mrs. J)
362 363	"They just told us that he had a speech delay. That's all they told us." (Mrs. B)
364	Mr. and Mrs. J, and Mrs. B further reported that terms like 'delay' or 'a little behind' led them to
365	believe that there wasn't really anything wrong with their child or that a few months of
366	intervention would help their child 'catch-up'. The lack of clarity these caregivers experienced
367	with the term "delay" connected closely with another theme that was prevalent, incomplete
368	information about a child's prognosis.
369	Incomplete Information about Long Term Outcomes/Consequences
370	As a whole, caregivers believed that certain topics were not adequately addressed or
371	made clear to them. In particular, caregivers reported receiving minimal information about the
372	long-term outcomes/consequences associated with their children's language delays or disorders.
373	Mrs. A expressed that her daughter's future was a regular topic of conversation between her and
374	her husband, "You know honestly we just don't know where her future is at this point. We are
375	hoping we get more understanding and more language out of her and more readingWe talk
376	about that a lot." Other typical responses from caregivers, when asked if information had been
377	given to them about possible long-term outcomes, included:
378	"Not that I recall." (Mrs. E)

379 "Nothing." (Mrs. A)

380	"No, it was kind of more like just more you know keep working and trying." (Mr. J)
381	The lack of clear prognostic information was particularly highlighted in two cases
382	involving late talkers. Neither Mr. and Mrs. B nor Mr. and Mrs. J, the children's parents, recalled
383	receiving any cautions regarding their sons' futures. Mrs. B shared that she believed her son
384	would outgrow the issue, stating "I mean they just told us, get him started and surely you know a
385	lot of kids you know overcome it you know by the time they're in kindergarten, first grade, that
386	they're you know on board with everybody else." When asked if she sought out any other
387	resources, Mrs. B responded, "I didn't just because I think I thought oh this is just a minor thing
388	we're just gonna blowover. So, I just thought oh with a little extra help before school starts, we'll
389	be good to go." Mr. B agreed, saying he thought at the time, "He'll get over it."
390	Mrs. J described a similar experience, saying that she had not been given any information
391	about future concerns. Her son, who was dismissed from speech services right before
392	kindergarten, was re-enrolled in speech services about a year later. Mrs. J noted that at the time
393	of dismissal, she had not realized that there still might be potential concerns:
394 395 396 397	"I wish the speech lady would have said you know Mom he's met this goal now but you know in the future sometimes we see blank blank; and that you know don't be afraid to reach out and this is how you do it."
397 398	A few of the caregivers did report receiving some long-term information, but the majority of
399	their examples occurred after years of intervention rather than early on. Mrs. J said that her son's
400	IEP team, specifically the principal, had shared with her and her ex-husband that their son's
401	learning disability was a long-term diagnosis, "He actually sat down with Mr. J and was like Mr.
402	J he has a true learning disability, it's not gonna go away."
403	At least five of the caregivers noted that it was not until they understood that their child
404	was not going to 'outgrow' their speech and language difficulty that they became truly open to

405	seeking out help for their child. For example, Mrs. A said, "I knew I can't get her past it and so I
406	knew I needed to reach out and find help somewhere." Ultimately, even if it was hard to hear at
407	first, caregivers wanted to know about future concerns and challenges that their children might
408	face, so they could be prepared.
409	Given that all of the children had been diagnosed with a language-based reading disorder,
410	one of the long-term consequences of a language impairment, caregivers were specifically asked
411	during the interview about any information they had received regarding the connection between
412	language and reading. At least four caregivers reported minimal to no conversations about the
413	language and reading connection, especially early on.
414	"No um no I never remember that conversation [about language connecting to reading]." (Mrs.J)
415	"I don't [recall having a conversation about reading and language]." (Mrs. C)
416	Seven caregivers said they recalled a connection between language and reading being
417	mentioned but could not remember what had been shared. For example, Mrs. G responded,
418	"Yeah I know she did some [discuss language and reading connection]." When asked if she
419	remembered anything about the conversation, Mrs. G responded, "Not really." Mrs. G's
420	response exemplified a typical response from the rest of the caregivers, who recalled the topic
421	being addressed but could not recall details. Therefore, even when the information was given,
422	there appeared to be a lack of recall on the caregivers' part, suggesting that further information
423	and follow up may be needed for most caregivers. Furthermore, this was one of the few areas
424	where there was a noticeable pattern of difference between SLP settings.
425	In contrast to the lack of information caregivers reported receiving regarding diagnostic
426	labels and long-term outcomes, all caregivers described receiving an abundance of information
427	about the speech and language services provided for their children, even referring to specific
428	goals and objectives that had been shared with them by their SLP. For example, Mrs. A shared a

429	recently updated goal for her child, "She can do one step and two step directions, [child] can, but
430	at three steps it's completely - It's gone. So yeah three - they're gonna start working with her on
431	the three step directions." This perception of being informed was very important to how the
432	caregivers viewed their child's overall services and their experience with the SLP, although
433	information about service provision did not help the caregivers understand their child's
434	diagnosis, long-term outcomes, or the relation between children's oral language abilities and
435	reading.
436	Quality of Experience Equates with Caregivers' Perception of Information
437	The caregivers placed a high value on receiving information from the SLP. When asked
438	about their experiences communicating with SLPs, caregivers consistently connected their level
439	of satisfaction with the level of information they received during their child's assessment or
440	intervention experience. Caregivers who believed they had been well informed by the SLP
441	recalled a constructive evaluation experience.
442 443	"They came in and went over the results with methey did a real good job of checking him out I thought." (Mr. J)
444 445 446	"They did really good. They detailed it really good for us so she (daughter) could understand along with me." (Ms. I)
447 448	In contrast, caregivers who experienced feelings of frustration with the evaluation or intervention
449	experience cited minimal to no explanations from the SLP:
450	"It was a very bad experience. They didn't explain things." (Mrs. A)
451 452	"I kind of left feeling like I wasn't sure what was going on you knowa little more concrete information would have been - would've made me feel better." (Mrs. F)
453 454	Mrs. G attempted to explain the magnitude as a caregiver of receiving or not receiving
455	information, "I had exhausted all my resources and I was here to hand them off to you [the SLP]
456	to figure it out. So, I really didn't feel like I came with a lot to offerI was looking at help us!

What do we need to do to help you help us...I'll do whatever you need!" Mrs. G went on to
explain that she did not need every detail, just enough information to help her child, "You know
I didn't need a five-hour meeting on it, I just need to know - is there something going, is there
not, and what do we do next."

461 Caregivers' Reported Understanding of Language and Literacy Disorders

Although no caregiver's description of their child was exactly the same as the others', across participants, three primary themes stood out regarding their understanding of language and literacy disorders: a language and literacy disorder was a problem that needed a solution; a language and literacy disorder was most easily defined by the characteristics of their child's speech/language and academic failures; and finally, language-based literacy disorders are difficult to comprehend without personal experience.

468 A Problem Needs a Solution

Considering the challenges that the caregivers' children faced, it is not surprising that each caregiver described their child's language-based literacy disorder as a problem. The word 'problem' was used several times in the caregivers' discourse when discussing their child, "her problem started when" or "the problem was." In addition to using the term problem, caregivers also demonstrated a tendency to speak in absolute language using words like *never* and *always* to emphasize the severity of their child's issue:

475 "It was no sentences no nothing." (Mrs. B)

476 "He has just always struggled when it comes to letter recognition." (Mrs. D)

477 "She could not focus, she could not sit still, she could not do anything." (Mrs. E)

478	In acknowledging their child's disorder as a problem, each caregiver also acknowledged
479	their need for help, as it was a problem they were not equipped to cope with on their own. Mrs.
480	G shared how she tried everything she could, but nothing seemed to work:
481 482 483 484 485	"We tried everything else we knew to do. We've tried after school, studying, tutors. Everything we could look up on the internet, games and we had exhausted all of my known resources, and I felt like I know enough to know I don't know everything, and it was time to call in somebody else to help."
486	Mrs. V shared a similar experience, noting the ongoing struggle of uncertainty:
487 488 489 490 491 492	"As we've gone through the years and struggled through school then it was like you know we've got to have something to figure out what's going [on] here because it got to the point where it's like you know we're really struggling and something's going [on] here we need to figure out what it is so we can figure out how to work with it."
493	Given that caregivers often did not feel equipped to deal with their child's language and
494	literacy disorders, many of them began to search for an explanation that would help them better
495	understand their child's problem, hence the caregivers' comments again focused on their child's
496	diagnosis. Diagnostic labels were often viewed by caregivers as the path to the solution. Mr. B
497	said, "How can you start addressing the issue until you know what the issue is and you can
498	match it with good evidence-based interventions?" In his mind, determining the best intervention
499	for his son was directly tied to identifying the cause of his son's reading difficulty. Mrs. G also
500	saw having a diagnosis as an essential step to understanding and helping her child or any child
501	with a disorder:
502 503 504	"Are they ok, is it something we can fix? How treatable is it? Is it going to you know is this going to affect them the rest of their life or is this something we can double down on get them past."
505 506	Her questions were similar to other questions that caregivers frequently asked in an effort to
507	understand their child's needs. Specifically, all of the caregivers discussed their child's future as
508	a key piece they were trying to understand, and the diagnosis was an important piece of the

process to help them understand their child's disorder, the solution to the problem. As Mrs. C
said, "To me the most absolute helpful thing was just having a diagnosis."

511 Speech, Language and Academic Characteristics

512 While the diagnosis was an essential component to how caregivers understood their 513 children's disorder, the practical implications of how the disorder affected their child were 514 important as well. While a variety of characteristics were attributed to each child's disorder, two 515 common descriptions emerged: how the disorder affected speech and language and how the 516 disorder affected academic performance.

Speech and language. Five caregivers referred specifically to characteristics of their 517 child's speech and language difficulties when describing their child, both in the past and 518 currently. When asked to describe her daughter's speech and language concern, Mrs. A began by 519 520 describing how her daughter's "garbled speech" had led her and her husband to seek speechlanguage services. Mrs. B talked about her son having no speech and language as a toddler, "ever 521 since he was probably two - three he just really didn't - speech was really delayed. I mean he 522 was one word like at the age of 3." While his expressive language has improved over the years, 523 both Mr. and Mrs. B noted that their son still has some difficulties expressing himself. They also 524 noted that both the SLP from his early intervention assessment and the SLP from his more recent 525 reading assessment, reported comprehension as a strength for him. Mr. and Mrs. J also made 526 observations regarding their son's language, noting that he was a late talker, "[he] didn't really 527 528 start talking until - making like even normal baby noises probably till he was one, and then I really, we knew - I knew he was delayed." Mr. J also referred to his son's difficulty with speech 529 sound production and sentence creation, "I think a lot of annunciations and yeah, phonics. I think 530 531 that was the main focus back then, and how to pronounce groups of letters and things like that...

532	And I think at the time (it was) it was just his language was lacking and his ability to form
533	sentences." The other caregivers who commented on their child's speech and language spoke
534	specifically about it not initially being a concern. As Mrs. D commented, "he can speak fine." In
535	fact, Mrs. G, described her daughter's early speech and language skills as above average.
536 537 538 539 540	She was advanced, she was advanced in everythingif anything she uses words that are too big for her and I wonder where she's getting them, because there are times where I'm looking at her and I think how do you know what that means? (Mrs. G)
541	Thus, for some caregivers, there was no concern until their child entered school.
542	Academic characteristics. For all but one of the caregivers, educational difficulties were
543	the first sign that something was wrong or something more was wrong. Three of the children
544	had been previously identified as late talkers, but one had been dismissed from services before he
545	started struggling academically, and one had received articulation therapy only. Difficulty with
546	spelling, reading, and writing stood out as the most frequent educational barrier. Mr. J summed
547	up his son's educational difficulties as a language arts problem, "his grades just aren't very good
548	you know, and he always needs additional helphe doesn't have the whole list of spelling words
549	like all the kids do, they give him a reduced list." Mrs. B discussed her son's difficulty in mixing
550	up his letters, spelling his name backwards, and in general not keeping up with his classmates:
551 552 553 554 555	"I know like he will write (his) some of his letters backwards. I notice b and d a lot. And he has both those in his name and he still - I mean /d/ is every day and he still messes that upif he reads it his comprehension is way down. It always seems like he's about a year behind on the grade level on his reading."
556	Mrs. E explained that she had never been concerned about her child's development prior to her
557	struggles with reading in school.
558 559 560	I am trying to remember back I never - nothing really clicked that there may have been something wrongI don't like to compare my children, but I know my oldest one - things just came very easy to her. I remember her talking sooner, but

then I had a son and it's very [different], and I don't think I was ever too much 561 concerned with J. 562 In talking about her child's educational difficulties, Mrs. D summed up the general 563 attitude that many of the caregivers believed their children had toward school, "it's always been 564 a struggle...We never get caught up, and he is always at the bottom of his reading level. School 565 isn't something he likes." Considering that it was often concerns about poor communication 566 skills and poor academic achievement that led caregivers to seek help for their children, it makes 567 sense that many caregivers would focus on some of those same characteristics when trying to 568 define their child's disorder. 569 **Difficult** to Understand 570 Finally, when asked to define their child's disorder, at least seven of the caregivers talked 571 specifically about how difficult it was for them to understand their child's diagnoses, particularly 572 to understand what it was like for their child to have a particular disorder. Mrs. C tried to 573 explain, "I don't understand dyslexia, I just, I don't have it. I mean I get the gist of it, but when 574 we're sitting down doing it (homework) in the back of my mind I'm just like why can't you do 575 this? This is easy, you sound it out." Mrs. D expressed a similar sentiment, trying to explain how 576 hard she found it to help her son: 577 "When he was little I would always try to [help], but I'm not - I don't know, the 578 way I learn and the way he learns is way different. For example, just like 579 spelling words when I was his age. If I needed to learn my spelling words I 580 would just write them 10 times or something. It's like when he writes them he's 581 writing them, but he's not going through the letters together...He could write 582 them 100 times, but if I asked him how to spell it he still wouldn't get it right." 583 The difficulty some caregivers have in understanding their child's disorder appeared to relate to 584 each caregiver's personal learning experiences. Both Mrs. C and Mrs. D noted that they did not 585 experience the academic struggles that their children have experienced. In contrast, Ms. I shared 586

that she "inverts words and letters all the time," adding "that's probably why I was more in tune[to her daughter's academic struggles]."

Caregivers also discussed how part of the challenge of understanding their child's 589 disorder was the manner in which labels changed. This was especially true for the three 590 caregivers whose children had been identified as late talkers early on. Mrs. A shared at least five 591 labels that had been presented as possibilities at various points "speech apraxia, learning 592 disorder, language processing disorder, dyslexia, and ADHD," making it understandable that she 593 struggled to define her child's disorder. Caregivers felt frustration as well that the knowledge 594 they did have often didn't seem to help. The caregivers with a background in education and 595 nursing felt that they should understand better, and felt frustrated that their education did not 596 necessarily help them help their child. All of the caregivers expressed a desire to try to 597 understand their child's disorder and find ways to assist their child. 598

599

Discussion

600 Sharing information that supports client and caregiver understanding of communication 601 disorders is a key component of the SLP's roles and responsibilities. While providing clear 602 diagnostic information is something all SLPs strive to do, the effectiveness of information 603 sharing is dependent on the listener's perception and retention of the given information. As 604 professionals in health care and education, it is important that we seek to understand how the 605 information we share is perceived by caregivers so that we can improve our services.

In the current study, we explored how caregivers perceive SLP communication and how that communication influences their perceptions of their children's language and literacy disorders. The six themes identified in the results were obtained by asking caregivers open-ended questions about their experiences and using qualitative methods to analyze their responses and

other information about their children. Each of the six themes provide relevant insights intocaregiver perspectives of SLP communication.

The first three themes, which related to Research Question 1, focused on the information 612 caregivers described receiving from SLPs regarding their child's language and literacy disorder. 613 These themes revolved around information caregivers viewed as valuable, such as the diagnosis, 614 information caregivers viewed as incomplete, such as long-term outcomes, and the connection 615 between the information they perceived being given and the quality of their experiences, with 616 more information equaling better experiences. The next three themes, which related to Research 617 Question 2, concentrated on how caregivers conceptualize their child's language and literacy 618 disorder. Themes related to this question included the idea that a language and literacy disorder 619 is a problem that needs a solution, that a language and literacy disorder was often understood by 620 621 the most noticeable characteristics of their child's speech, language, and academic difficulties, and that language and literacy disorders were difficult to understand. Below we briefly discuss 622 the findings as they relate to the research questions, previous studies, and clinical practice. 623

624 The Power of a Diagnosis

The themes across both research questions highlighted the value caregivers place on 625 626 receiving a diagnosis. Receiving a diagnostic label was mentioned repeatedly by the caregivers throughout the interviews; it was something they wanted from their SLPs at the time of their 627 child's evaluation, and receiving a diagnosis was associated with positive communication 628 629 experiences. Additionally, when caregivers believed they had a clear diagnosis, they felt like they had something they could act upon, whether that meant using the diagnosis to request 630 631 services or using it to help them understand and explain their child's difficulties to others. For 632 caregivers, having a diagnosis meant having the power to change their child's future. Without a

clear diagnostic label, caregivers felt unsure of what came next, and were more likely to be 633 disappointed in their communication experience. 634

It should also be noted that even though caregivers placed a high value on receiving 635 information at the time of the evaluation, they also acknowledged that they struggled to recall a 636 great deal of the information they had initially received (e.g., details regarding the diagnosis, 637 prognostic information, descriptions of the intervention process), and valued receiving follow-up 638 information from the SLP. As Luterman et al., (1999) notes, there are several reasons why 639 caregivers may struggle to recall the majority of the information provided to them at an initial 640 evaluation including an inability to cognitively process and retain rational information while in 641 an emotionally overwhelmed state. A caregiver not recalling information does not mean it was 642 not shared, but it does suggest that the information may not have been well enough understood to 643 be retained long-term. SLPs need to be aware that even if a caregiver claims understanding at 644 the time of the evaluation, the caregiver may not retain the given information and understanding 645 of the information over time. Rather than feeling frustrated at having to repeat information, SLPs 646 should consider information sharing an ongoing process over the course of the relationship, not a 647 stagnant event. Furthermore, periodic checks for caregiver understanding should be considered 648 part of a typical routine in the process of maintaining a productive relationship with a caregiver. 649

650

Clarity Is in the Eye of the Beholder

The caregivers' desire for a clear diagnosis is important to note because not all diagnoses 651 652 were perceived equally by caregivers. Notably, caregivers did not always perceive certain speech-language labels as a diagnosis, referring to terms such as 'speech or language delay' as a 653 vague description only. This finding is consistent with previous studies that have pointed to the 654 655 difficulties associated with the term 'delay' and with the lack of clear and consistent labels in

656	identifying children with language disorders (Bishop, 2014; Reilly et al., 2014; Hadley &
657	Schuele, 1999). Also, difficulty in recognizing a diagnosis was not limited to oral language
658	disorders. For literacy disorders, caregivers typically understood a diagnosis of dyslexia, but they
659	did not always interpret other diagnoses such as "mixed reading disorder" and "reading
660	comprehension deficit," as diagnoses. One reason for this misunderstanding may be the lack of
661	continuity in labeling language and literacy disorders across settings (Dollaghan, Nelson, &
662	Scott, 2012). Other factors may include SLP reports that describe a child's strengths and
663	weaknesses without offering a diagnostic label, or a general lack of caregiver familiarity with
664	language and literacy disorder terms beyond the well-publicized labels of autism and dyslexia.
665	A number of papers have been written about the value of giving caregivers clear
666	diagnostic information and the need for the field to settle on a consistent set of terms to describe
667	children's language and literacy disorders (Bishop et al., 2017; Catts et al., 2006; Dollaghan,
668	Nelson, & Scott, 2012; Leonard, 2014; Paul, Rice, & Ellis Weismer, 2019; Rice & Warren,
669	2005; Schuele & Hadley, 1999; Van Horne, Ebbels, Redmond, & Finestack, 2018; Volkers,
670	2018). However, none of these previous papers has included input from caregivers, even though
671	caregivers are the most important stakeholders in the discussion as they seek out our services and
672	determine whether our services are of value to their children. The current study is the second of
673	two that has asked caregivers directly about their perceptions of SLP communication practices.
674	As was found in the current study, caregivers interviewed by Ash et al. (2020) also placed a high
675	value on receiving a clear diagnostic label for their children, and they were frustrated by the lack
676	of information they felt should have been given to them, even though they were generally
677	satisfied with their SLP's communications regarding their child's therapy goals and objectives.

In addition to emphasizing the importance of a clear diagnosis to caregivers, the findings 678 from this study point to a crucial area of information that caregivers perceived to be incomplete 679 or unclear: the long-term consequences of language disorders. Considering the important role 680 that language plays in literacy development, it is important that SLPs address this area of 681 incomplete information. Deciding when and how much information to share can be a challenge. 682 SLPs must often determine what the most critical pieces of information are to share initially, as 683 well as how much information needs to be shared and possibly re-visited over time. Furthermore, 684 prognostic information, while reflecting the best educated guess about a child's future, may not 685 always be accurate. However, given what the literature tells us about late talkers and the 686 connection between early language skills and later literacy skills, sharing information about 687 possible reading risk factors may help caregivers be more proactive and able to take steps that 688 would reduce potentially negative consequences before their child falls behind in school (Kruse 689 et al., 2015; Wilcox & Woods, 2011). 690

691 Finding Meaning

Caregivers as a whole expressed the view that their understanding of their child's 692 language and literacy disorder was complicated, influenced by their history, and constantly 693 694 evolving over time and with new experiences. The limited understanding that caregivers had of their child's disorder reflects key concepts within family systems theory, particularly in regard to 695 family coping (e.g., Manning et al., 2011; McCubbin et al., 1983). Similar to this study, Manning 696 697 et al. (2011) found that caregivers of children with Autism went through a complex process of trying to understand what it meant to raise a child with Autism. Factors including behavior 698 severity and the families' ability to reframe or redefine their children's disorder were key 699 700 components in how families successfully came to understand their child's disorder. This study,

701	as well as others, emphasized the complexities of the information exchanges that occur over
702	time, both within and outside of a family system that can shape caregiver understanding of a
703	disorder (Pecchioni & Keeley, 2011). Furthermore, the literature shows that caregivers'
704	perceptions of their health care provider's communication is key to shaping both their
705	perspective of their experiences and their perspective of their child's disorder (e.g., Brown,
706	Stewart, & Ryan, 2003; Donovan, Hartenbach, & Method, 2005; Propp et al., 2010). These
707	findings match those of the current study, as the caregivers frequently connected SLP
708	communication practices to their perceived quality of experience, and they also credited the SLP
709	with shaping their attitudes and beliefs about their child's language and literacy disorder.
710	In seeking to establish a shared meaning, it is also important to understand how
711	caregivers view their child's disorder. Caregiver's descriptions of their child's language and
712	literacy disorder tended to focus on the behavioral traits that clearly manifest themselves in their
713	child's speech, language, and educational performance over time. Each caregiver was able to
714	describe the "garbled speech" or the "failed spelling test" that first made them aware that their
715	child was struggling. However across caregivers, there was a lack of discussion about the
716	broader characteristics of their child's disorder, the strengths and weaknesses presented, the
717	connections between their particular language profile, and their specific reading struggles. A
718	review of the reports in the university clinic files suggest that this type of information was
719	provided in written form at least, but it may not have resonated with the caregivers whose focus
720	was more on the functional problem at hand, how to help their child do better academically.
721	In contrast, caregivers presented as very knowledgeable about their child's therapy goals.
722	Possibly this was a factor of repetition, as goals that are being addressed in therapy may be
723	discussed more often and therefore be more memorable, or possibly this was a factor of the goals

presenting as practical and functional steps that the caregivers could easily see as measures of 724 their child's progress towards success. In seeking to reach a mutual understanding of the 725 disorder, one strategy may be for SLPs to communicate more frequently with caregivers about 726 the relevance of their child's goals and objectives to addressing the child's specific language and 727 literacy disorder. For example, if a child is working on identifying macrostructure within a 728 narrative, talking with the caregiver about how the stated goal specifically addresses their child's 729 literacy and academic success. Making these connections could help caregivers better understand 730 their child's disorder and become more involved collaborators. 731

732 Clinical Implications

The findings from this study suggest several implications regarding SLP communication 733 practices. First, the findings underscore how important it is for SLPs to provide caregivers clear 734 diagnostic labels as part of their clinical services. Receiving a diagnosis was highlighted 735 repeatedly throughout the interviews. Given this and given that a number of caregivers were 736 unclear about their child's diagnosis, SLPs should review their reports and post-evaluation 737 family meetings to identify when and how they communicate diagnostic information to 738 caregivers. SLPs may also want to add more direct statements about a child's diagnosis into their 739 reports and meetings. These statements could include "the diagnosis is , and this is what 740 means", or "here is a list of possible diagnoses we've considered, and a diagnosis of 741 best aligns with your child's current communication profile for these reasons". 742 743 SLPs may also want to consider offering caregivers a list of other diagnostic terms that they may encounter for their child within other settings (e.g., schools, insurance companies) or when 744 working with other professionals. As Murza and Ehren (2020) suggest, this will require SLPs 745 746 and pre-professional SLPs to be well informed of the various labels used within and outside of

the field and to share this information with caregivers, so that caregivers can better navigate the labels their child may encounter. In cases where a child's diagnosis is not clear and cannot be given, the findings also suggest that SLPs should directly discuss with caregivers why this is so, what steps can be taken without a diagnosis, and the expected time when a diagnosis might be better established. For these cases (or for children whose diagnosis is likely to change with age), the findings highlight the importance of SLPs scheduling future meetings with caregivers to discuss not only their child's progress but also their diagnosis.

Secondly, the findings underscore the importance of talking to caregivers about the long-754 755 term consequences of language disorders, and the connection between language and reading. The caregivers shared that they were often thinking about their child's future, and the connection 756 between language and literacy represented significant gaps in their knowledge. To address these 757 gaps, SLPs may want to consider increasing their provision of educational materials about the 758 evolving nature of childhood language disorders and prognostic factors, and the relation between 759 language and literacy. These materials could include short video presentations or wall displays in 760 clinic waiting rooms, and/or podcasts, pamphlets, and infographics – all of which could be 761 developed for specific topics and presented to families at different points of care (e.g., initial 762 contact, review of an evaluation or progress report, service dismissal) or by month within a 763 calendar year, with each month devoted to a different topic. SLP participation in family support 764 groups, both locally and through social media outlets, may also help caregivers access 765 766 information (and help SLPs better understand what caregivers want and need). Finally, public awareness campaigns, focused on childhood language and literacy disorders, have been 767 recommended and are increasing within our field (e.g., https://radld.org, 768 769 https://www.dldandme.org). SLP involvement in these campaigns are needed to help caregivers,

their extended families, and others outside of the field understand the nature of childhoodlanguage and literacy disorders.

Finally, the results of the study highlight the importance of seeking to understand the 772 client/caregiver's perception of their/their child's communication disorder. Understanding a 773 caregiver's perception of his or her child's diagnosis can help the SLP respond appropriately to 774 the caregiver's needs and expectations, and provide appropriate resources to fill in the 775 information gaps. If an SLP had a significantly different expectation for the child than the 776 caregiver, the divergence of expectations may result in miscommunications and fractured 777 778 relationships. For example, a caregiver may not understand why a particular intervention strategy is chosen, and may become frustrated because he or she does not see how the 779 intervention is going to help the child (e.g., the caregiver perceives the child to have a 'reading 780 problem' and wonders why the SLP spends time working with the child on understanding and 781 identifying story grammar elements). Similarly, if a caregiver expects a diagnosis to lead to a 782 solution that will "fix" their child, he or she may become frustrated when months pass and their 783 child continues to struggle. A shared understanding of the diagnosis and prognostic factors can 784 help caregivers and SLPs truly collaborate on service and intervention decisions. It can also help 785 caregivers to have a realistic view of how the SLP can help their child. This study focused on 786 language and literacy disorders, but the importance of seeking to understand the 787 client/caregiver's perspective is universal to the evidence-based assessment and treatment of any 788 789 communication disorder.

790 Limitations and Future Studies

As with any research endeavor, there were limitations to this study. Drawn from aconvenience sample, the participants lacked cultural diversity, lived in one region in the

Midwest, spoke English as their first language, and were well educated. Caregivers from more 793 diverse backgrounds may present with different concerns and opinions about the communication 794 they have received from their SLPs. Another limitation to the study was the timing of the 795 interview relative to the evaluation. Although all children were receiving language services by an 796 SLP at the time of the study, their evaluations were conducted five to 17 months before the 797 interviews. In the future, it may be advantageous to conduct multiple interviews throughout a 798 child's evaluation and treatment program in order to examine evolving caregiver perceptions and 799 needs. Focusing on one SLP experience per caregiver may also yield clearer results, as some of 800 801 the variance in experiences could be related to norms in different settings. Future studies may also want to target caregivers of younger and older children and children with different types of 802 speech and language disorders to see how caregiver perceptions of SLP communications differ 803 as a function of their child's age and diagnosis. Following the methods of Lyons and Roulstone 804 (2018) and Fourie et al. (2011), future studies may want to target children as the interviewees to 805 gain their perspective on their SLPs' communication about their language and literacy disorders. 806 Finally, it's important to note that caregiver responses might have been inhibited by their 807 knowledge that the interviewer was an SLP. Future studies may benefit from training a 808 809 professionally neutral interviewer.

810 Conclusion

Research in the field of health communication tells us that effective information sharing with clients and caregivers can be as important as choosing the right diagnosis and treatment approach (e.g., Wanzer et al., 2004). Using literature in health communication as a guide and utilizing a qualitative methodology, the current study explored how caregivers perceive SLP communication and how that communication influences caregivers' understanding of their

child's language and literacy disorder. In terms of information sharing, caregivers universally 816 stressed the value of receiving a clear diagnosis, and these clear diagnoses did not include all of 817 the terms (e.g., delay, mixed reading disorder) that SLPs currently offer. Caregivers also 818 expressed the need for more information regarding long-term language and literacy disorder 819 outcomes, especially related to reading. Finally, not understanding their child's disorder was a 820 constant struggle for caregivers, especially if they did not have personal experiences to draw 821 upon. These findings underscore the need for SLPs to: 1) offer diagnostic labels and explain 822 these labels to caregivers, even when a child's diagnosis is expected to change with age, 2) 823 824 discuss with families the relationship between oral language and literacy and possible long-term outcomes of a language disorder, and 3) add to clinical practice, repeated opportunities to 825 educate caregivers and check caregiver understanding of their child's language and literacy 826 827 disorder.

828

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836	References
837	Adlof, S. M., & Hogan, T. P. (2018). Understanding dyslexia in the context of developmental
838	language disorders. Language, Speech, and Hearing Services in Schools, 49, 762-773.
839	https://doi.org/10.1044/2018_LSHSS-DYSLC-18-0049
840	Alt, M, Gray S., Hogan, T. P., Schlesinger N., & Cowan N. (2019). Spoken word learning
841	differences among children with dyslexia, concomitant dyslexia and developmental
842	language disorder, and typical development. Language, Speech, and Hearing Services in
843	Schools, 50(4), 540-561. https://doi.org/10.1044/2019_LSHSS-VOIA-18-0138
844	American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders
845	(5 th ed.). Washington, DC: Author.
846	American Speech-Language-Hearing Association. (2004). Preferred practice patterns for the
847	profession of speech-language pathology [Preferred Practice Patterns]. Retrieved from
848	www.asha.org/policy
849	American Speech-Language-Hearing Association. (2005). Evidence-based practice in
850	communication disorders [Position Statement]. Retrieved from www.asha.org/policy
851	Angell, M. E., Stoner, J. B., & Shelden, D. L. (2009). Trust in education professionals:
852	Perspectives of mothers of children with disabilities. Remedial and Special Education,
853	30(3), 160-176. https://doi.org/10.1177/0741932508315648
854	Ash, A., Christopulos, T., Redmond, S. (2020). Tell me about your child: A grounded theory
855	study of mothers' understanding of childhood language disorder. American Journal of
856	Speech-Language Pathology, 29, 819-849. <u>https://doi.org/10.1044/2020_AJSLP-19-</u>
857	00064

- Ben-Joseph, E. P., Dowshen, S. A., & lzenberg, N. (2009). Do parents understand growth charts?
 A national, internet-based survey. *Pediatrics*, *124*(4), 1100-1109.
- 860 <u>https://doi.org/10.1542/peds.2008-0797</u>
- 861 Berger, C. R. (1997). LEA's communication series. Planning strategic interaction: Attaining

goals through communicative action. Lawrence Erlbaum Associates Publishers.

- 863 Bishop, D. V. M. (2014). Ten questions about terminology for children with unexplained
- 864 language problems. *International Journal of Language & Communication Disorders*,
- 865 *49*(4), 381-415. <u>https://doi.org/10.1111/1460-6984.12101</u>
- Bishop, D. V. M., Snowling, M. J., Thompson, P. A., Greenhalgh, T., & the CATALISE-2
- consortium. (2017). Phase 2 of CATALISE: A multinational and multidisciplinary Delphi

consensus study of problems with language development: Terminology. *Journal of Child*

869 *Psychology and Psychiatry*, 58(10), 1068-1080. <u>https://doi.org/10.1111/jcpp.12721</u>

- Brown, J. B., Stewart, M., & Ryan, B. L. (2003). Outcomes of patient-provider interaction.
- Handbook of health communication. (pp. 141-161). Mahwah, NJ, US: Lawrence ErlbaumAssociates Publishers.
- Burns, M. I., Baylor, C. R., Morris, M. A., McNalley, T. E., & Yorkston, K. M. (2012). Training
- healthcare providers in patient-provider communication: What speech-language
- pathology and medical education can learn from one another. *Aphasiology*, 26(5), 673-
- 876 688. <u>https://doi.org/10.1080/02687038.2012.676864</u>
- 877 Catts, H. W., Adlof, S. M., Hogan, T. P., & Ellis-Weismer, S. (2005). Are specific language
- 878 impairment and dyslexia distinct disorders? *Journal of Speech, Language, and Hearing*
- 879 *Research*, 48, 1378-1396. <u>https://doi.org/10.1044/1092-4388(2005/096)</u>

880	Catts, H. W., Adlof, S. M., & Weismer, S. E. (2006). Language deficits in poor comprehenders:
881	A case for the simple view of reading. Journal of Speech, Language & Hearing
882	Research, 49(2), 278-293. https://doi.org/10.1044/1092-4388(2006/023)
883	Catts, H. W., Hogan, T. P., & Fey, M. E. (2003). Subgrouping poor readers on the basis of
884	individual differences in reading-related abilities. Journal of Learning Disabilities, 36,
885	151-164. https://doi.org/ 10.1177/002221940303600208
886	Catts, H. W., Fey, M. E., Tomblin, J. B., & Zhang, X. (2002). A longitudinal investigation of
887	reading outcomes in children with language impairments. Journal of Speech, Language
888	& Hearing Research, 45(6), 1142-1157. https://doi.org/ 10.1044/1092-4388(2002/093)
889	Crais, E. R., Roy, V. P., & Free, K. (2006). Parents' and professionals' perceptions of the
890	implementation of family-centered practices in child assessments. American Journal of
891	Speech-Language Pathology, 15(4), 365-377. https://doi.org/10.1044/1058-
892	<u>0360(2006/034)</u>
893	Dolch, E. (1936). A basic sight vocabulary. The Elementary School Journal, 36(6), 456-460.
894	Dollaghan, C., Nelson N. W., & Scott, C. (2012). What's in a name subtyping and labeling in
895	language disorders. Paper presented at the annual convention of the American Speech-
896	Language-Hearing Association, Atlanta, GA.
897	Donovan, H. S., Hartenbach, E. M., & Method, M. W. (2005). Patient-provider communication
898	and perceived control for women experiencing multiple symptoms associated with
899	ovarian cancer. Gynecologic Oncology, 99(2), 404-411.
900	https://doi.org/10.1016/j.ygyno.2005.06.062
901	Ferguson, A., & Armstrong, E. (2004). Reflections on speech-language therapists' talk:
902	Implications for clinical practice and education. International Journal of Language &

- 903 *Communication Disorders, 39*(4), 469-477.
- 904 https://doi.org/10.1080/1368282042000226879
- 905 Fourie, R. (2009). Qualitative study of the therapeutic relationship in speech and language
- 906 therapy: Perspectives of adults with acquired communication and swallowing disorders.
- 907 International Journal of Language & Communication Disorders, 44(6), 979-999.
- 908 https://doi.org/10.3109/13682820802535285
- 909 Fourie, R., Crowley, N., & Oliviera, A. (2011). A qualitative exploration of therapeutic
- 910 relationships from the perspective of six children receiving speech-language therapy.
- 911 *Topics in Language Disorders, 31*(4), 310-324.
- 912 <u>https://doi.org/10.1097/TLD.0b013e3182353f00</u>
- 913 Gillam, R. B., & Pearson, N. A. (2004). Test of narrative language. Austin, TX: PRO-ED.
- Hand, L. (2006). Clinicians as "information givers": What communication access are clients
- given to speech-language pathology services? *Topics in Language Disorders, 26*(3), 240-
- 916 265. <u>https://doi.org/ 10.1097/00011363-200607000-00007</u>
- 917 Hare, J., Skinner, D., & Kliewer, D. (1989). Family systems approach to pediatric bone marrow
- 918 transplantation. *Children's Health Care, 18*(1), 30-36.
- 919 <u>https://doi.org/10.1207/s15326888chc1801_4</u>
- 920 Hengst, J. A., & Duff, M. C. (2007). Clinicians as communication partners: Developing a
- 921 Mediated discourse elicitation protocol, *Topics in Language Disorders*, 27(1), 37-49.
- 922 https://doi.org/ 10.1097/00011363-200701000-00005
- 923 Hester, E. J., & Stevens-Ratchford, R. (2009). Health literacy and the role of the speech-
- 924 language pathologist. *American Journal of Speech-Language Pathology*, 18(2), 180-191.
- 925 https://doi.org/ 10.1044/1058-0360(2009/08-0005)

- 926 Hidecker, M.J.C., Jones, R.S., Imig, D.R., & Villarruel, F.A. (2009). Using family paradigms to
- 927 improve evidence-based practice. *American Journal of Speech Language Pathology*,

928 *18*(3), 212-221. <u>https://doi.org/10.1044/1058-0360(2009/08-0011)</u>

- 929 Kruse, L.G., Spencer, T.D., Olszewski, A., & Goldstein, H. (2015). Small groups, big gains:
- 930 Efficacy of a tier 2 phonological awareness intervention with preschoolers with early
- 931 literacy deficits. *American Journal of Speech-Language Pathology*, *24*(2), 189-205.
- 932 <u>https://doi.org/10.1044/2015</u> AJSLP-14-0035
- 933 Kvale, S. (1996). Interviews: An introduction to qualitative research interviewing. Thousand
 934 Oaks, CA: Sage Publications.
- Leahy, M. M., & Walsh, I. P. (2008). Talk in interaction in the speech-language pathology clinic:
 Bringing theory to practice through discourse. *Topics in Language Disorders, 28*(3), 229241. https://doi.org/10.1097/01.TLD.0000333598.53339.5a
- B. (2014). Children with specific language impairment (2nd ed.). Cambridge, MA:
 MIT Press.
- 940 Leslie, L., & Caldwell, J. A. (2011). Qualitative reading inventory: 5. Boston, MA:
- 941 Pearson/Allyn & Bacon.
- Luterman, D., & Kurtzer-White, E. (1999). Identifying hearing loss: Parents' needs. American
 Journal of Audiology, 8(1), 13-18. https://doi.org/doi:10.1044/1059-0889(1999/006)
- 944 Lyons, R., & Roulstone, S. (2018). Well-being and resilience in children with speech and
- 945 language disorders. *Journal of Speech Language and Hearing Research*, *61*(1), 324-344.
- 946 <u>https://doi.org/10.1044/2017_JSLHR-L-16-0391</u>

947	Manning, M. M., Wainwright, L., & Bennett, J. (2011). The double abcx model of adaptation in
948	racially diverse families with a school-age child with autism. Journal of Autism &
949	Developmental Disorders, 41(3), 320-331. https://doi.org/10.1007/s10803-010-1056-1
950	McCubbin, H. I., McCubbin, M. A., Patterson, J. M., Cauble, A. E., Wilson, L. R., & Warwick,
951	W. (1983). Chip-coping health inventory for parents: An assessment of parental coping
952	patterns in the care of the chronically ill child. Journal of Marriage & Family, 45(2),
953	359-370. https://doi.org/10.2307/351514
954	Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative data analysis: A methods
955	sourcebook. Thousand Oaks, CA: Sage Publications.
956	Murza, K. A., & Ehren, B. J. (2020). Considering the language disorder label debate from a
957	school speech-language pathology lens. Perspectives of the ASHA Special Interest
958	Groups, 5(1), 47-54. https://doi.org/10.1044/2019_PERSP-19-00077
959	O'Malley, M. P. (2011). Exploring gender and power in clinical encounters. In R. J. Fourie (Ed.),
960	Therapeutic processes for communication disorders. New York: Psychology Press.
961	Paul, R., Norbury, C., Gosse, C., & Paul, R. (2018). Language disorders from infancy through
962	adolescence: Listening, speaking, reading, writing, and communicating. St. Louis, MO:
963	Elsevier.
964	Paul, R., Rice, M. L., & Ellis Weismer, S. (2019). Child language disorder: An open
965	conversation about identification and terminology. Session presented at the symposium
966	for Research in Child Language Disorders, Madison, WI.
967	Pecchioni, L. L., & Keeley, M. P. (2011). Insights about health from family communication
968	theories. In T. L. Thompson, R. Parrott & J. Nussbaum (Eds.), Handbook of health
969	communication, 2nd. London: Taylor and Francis.

970	Petscher, Y., Justice, L. M., & Hogan, T. P. (2018). Modeling the early language trajectory of
971	language development and its relation to poor reading comprehension. Child
972	Development, 89, 2136-2156. https://doi.org/10.1111/cdev.12880
973	Propp, K., Apker, J., Ford, W., Wallace, N., Serbenski, M., & Hofmeister, N. (2010). Meeting
974	the complex needs of the health care team: Identification of nurse-team communication
975	practices perceived to enhance patient outcomes. Qualitative Health Research, 20(1), 15-
976	28. <u>https://doi.org/10.1177/1049732309355289</u>
977	Porter, K. L. (November, 2013). An exploration of the perceived challenges of families raising
978	children with communication disorders. Poster presentation at the annual convention of
979	the American Speech Language Hearing Association, Chicago, IL.
980	Porter, K. L., Ash, A. C., Redmond, S. M., & Oetting, J. B. (November, 2016). Caregiver
981	perceptions of diagnostic labels applied to their children with language/reading
982	impairments. Paper presented at the annual convention of the American Speech-
983	Language-Hearing Association, Philadelphia, PA.
984	Reilly, S., Tomblin, B., Law, J., McKean, C., Mensah, F. K., Morgan, A., Wake, M. (2014).
985	Specific language impairment: A convenient label for whom? International Journal of
986	Language & Communication Disorders, 49(4), 416-451. https://doi.org/10.1111/1460-
987	<u>6984.12102</u>
988	Rescorla, L. (2002). Language and reading outcomes to age 9 in late-talking toddlers. Journal of
989	Speech, Language & Hearing Research, 45(2), 360.
990	Rice, M. L., & Warren, S. F. (2005). Moving toward a unified effort to understand the nature and
991	causes of language disorders. Applied Psycholinguistics, 26(1), 3-6. https://doi.org/

992 <u>10.1017/S0142716405050022</u>

- Saletta, M. (2018). Reading disabilities in adolescents and adults. Language. Speech. and 993 Hearing Services in Schools, 49(4), 787–797. https://doi.org/10.1044/2018 LSHSS-994 DYSLC-18-0005 995 Scarborough, H.S. (2001). Connecting early language and literacy to later reading (dis)abilities: 996 Evidence, theory, and practice. In S. N. D. Dickinson (Ed.), Handbook for research in 997 998 early literacy (pp. 97-110). New York: Guilford Press. Schuele, C. M., & Hadley, P. A. (1999). Potential advantages of introducing specific language 999 impairment to families. American Journal of Speech-Language Pathology, 8(1), 11-22. 1000 1001 https://doi.org/10.1044/1058-0360.0801.11 Schwartz, R. G. (2017). Handbook of child language disorders. NY: Taylor & Francis. 1002 Shelden, D. L., Angell, M. E., Stoner, J. B., & Roseland, B. D. (2010). School principals' 1003 1004 influence on trust: Perspectives of mothers of children with disabilities. The Journal of Educational Research, 103(3), 159-170. https://doi.org/10.1080/00220670903382921 1005 Seidenberg, M., & MacDonald, M. (2018). The impact of language experience on language and 1006 1007 reading: A statistical learning approach. Topics in Language Disorders, 38(1), 66-83. https://doi.org/ 10.1097/TLD.00000000000144 1008 1009 Semel, E., Wiig, E. H., & Secord, W. A. (2003). Clinical evaluation of language fundamentals, fourth edition (CELF-4). Toronto, Canada: The Psychological Corporation/A Harcourt 1010
- 1011 Assessment Company.
- 1012 Simmons-Mackie, N., & Damico, J. S. (2009). Engagement in group therapy for aphasia.
- 1013 Seminars in Speech & Language, 30(1), 18-26. <u>https://doi.org/ 10.1055/s-0028-110453</u>

- Simmons-Mackie, N., & Damico, J. S. (2011). Exploring clinical interactions in speech-language
 therapy: Narrative, discourse, and relationships. In R. J. Fourie (Ed.), Therapeutic
 processes for communication disorders. New York, NY: Psychology Press.
- Stake, R. E. (2005). *Qualitative Case Studies*. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (p. 443–466). Sage Publications Ltd.
- 1019 Stone, J.R. (1992). Resolving relationship problems in communication disorders treatment: A
- 1020 systems approach. *Language, Speech, and Hearing Services in Schools, 23*(4), 300-307.
- 1021 Stoner, J. B., Bailey, R. L., Angell, M. E., Robbins, J., & Polewski, K. (2006). Perspectives of
- 1022 parents/guardians of children with feeding/swallowing problems. *Journal of*
- 1023
 Developmental & Physical Disabilities, 18(4), 333-353. <u>https://doi.org/10.1007/s10882-</u>

 1024
 006-9020-x
- 1025 Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative
- 1026 research (COREQ): A 32-item checklist for interviews and focus groups. *International*
- 1027 *Journal for Quality in Health Care, 19*(6), 349-357.
- 1028 <u>https://doi.org/10.1093/intqhc/mzm042</u>
- 1029 U.S. Department of Education. (2006). IDEA Website. Retrieved from
- 1030 http://idea.ed.gov/explore/home.
- 1031 Van Horne, A., Ebbels, S., Redmond, S., & Finestack, E. (2018). A debate on terminology in
- 1032 child language research programs. Panel presented at the annual convention of the1033 American Speech-Language-Hearing Association, Orlando, FL.
- van Zanten, M., Boulet, J. R., & McKinley, D. (2007). Using standardized patients to assess the
 interpersonal skills of physicians: Six years' experience with a high-stakes certification

- examination. *Health Communication*, 22(3), 195-205.
- 1037 https://doi.org/10.1080/10410230701626562
- 1038 Volkers, N. (2018). Diverging views on language disorders. *The ASHA Leader, 23*, 44-53.

1039 <u>https://doi.org/10.1044/leader.FTR1.23122018.44</u>

- Wagner, R. K., Torgesen, J. K., Rashotte, C. A., Pearson, N. A. (2013). Comprehensive test of
 phonological processing, Second edition (CTOPP-2). Austin, TX: PRO-ED.
- 1042 Walsh, I. P. (2007). Small talk is "big talk" in clinical discourse: Appreciating the value of
- 1043 conversation in SLP clinical interactions. *Topics in Language Disorders*, 27(1), 24-36.
- 1044 <u>https://doi.org/ 10.1097/00011363-200701000-00004</u>
- 1045 Wanzer, M. B., Booth-Butterfield, M., & Gruber, K. (2004). Perceptions of health care providers'

1046 communication: Relationships between patient-centered communication and satisfaction.

1047 *Health Communication*, 16(3), 363-384. <u>https://doi.org/10.1207/S15327027HC1603_6</u>

- 1048 Wiederholt, J. L., & Bryant, B. R. (2012). Gray oral reading tests, fifth edition (GORT-5).
- 1049 Austin, TX: Pro-Ed.
- 1050 Woods, J. J., Wilcox, M. J., Friedman, M., & Murch, T. (2011). Collaborative consultation in
- 1051 natural environments: Strategies to enhance family-centered supports and services.
- Language Speech Hearing Services in Schools, 42(3), 379-392.
- 1053 <u>https//doi.org/10.1044/0161-1461(2011/10-0016)</u>
- 1054
- 1055 Figure 1. Data Collection and Review Process

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- 1050 Figure 2. Network Illustrating Themes Related to Caregiver Descriptions of Receiving
- 1058 Information from SLPs*1059

1060 *The numbers in Figure 2 represent the current number of associated caregiver "quotes" with a

particular theme at the time this visual was created. These numbers changed several timesthroughout the analysis process as final themes were established.