

## **The Role of Family Intervention in Communication Disorders: A Comprehensive Review of the Literature**

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## Abstract

The family's role during language acquisition is a prominent one and social-interactionist theories of language development support the dominant role of the primary caregiver in facilitating competent communication in young children. This study uses a narrative review of scholarly literature to examine the role of the family in interventions for communication disorders. The most significant themes emerging from the literature were linked to the significant gap between research and practice with respect to family-centred interventions. Overall, while the literature clearly supports the family's role during interventions, significant professional barriers exist on the part of speech-language pathologists (SLPs) with respect to family-based service provision, channels for empowering families and the perceived low competency of families. Future research should focus on opportunities for bridging this gap by creating functional relationships between educators, SLPs and families. Resistance to including families in interventions could be emerging from a failure of training programs to reflect family-centeredness in practice, as opposed to in theory, and educators could play a pivotal role in initially bridging this research–practice gap by opening channels for communication between families and SLPs.

**Key words:** *communication disorders, language disorders, interventions*

## ملخص الدراسة

يعد دور الأسرة خلال فترة اكتساب اللغة عنصر بارزاً؛ لذلك تدعم نظريات التفاعل الاجتماعي لتطوير اللغة دور موظفي الرعاية الصحية في تسهيل كفاءة التواصل عند الأطفال. تستخدم هذه الدراسة التحليل السردى للإنتاج الفكري العلمي لفحص دور الأسرة في التدخل لحل اضطرابات التواصل. وارتبطت أكثر الأقوال المنبثقة من الأعمال العملية بالفجوة بين البحث والتطبيق فيما يخص التدخل الأسرى. وبشكل عام؛ فبينما تدعم الأعمال العلمية دور الأسرة خلال فترة التدخل

بشكل واضح فقد وجدت عوائق مهنية واضحة لعلماء أمراض اللغة والنطق تتعلق بالخدمات التي تمدها الأسرة ووسائل مساعدة الأسرة وفهم ضعف كفاءة الأسر. ولذلك يجب أن تركز الأبحاث المستقبلية على الفرص التي تدعم سد الفجوات عن طريق خلق علاقات وظيفية بين التربويين والأسر وعلماء أمراض النطق واللغة. حيث تنبثق مقاومة تضمين تدخل الأسر من فشل البرامج التدريبية مما يعكس محورية دور الأسرة والتربويين؛ عكس ما جاء في النظرية؛ في سد فجوة تطبيق الأبحاث عملياً من خلال وسائل الاتصال المفتوحة بين الأسر وعلماء أمراض اللغة والنطق.

**الكلمات الرئيسية:** اضطرابات التواصل، اضطرابات اللغة، والتدخلات

## 1. Introduction

A communication disorder can detrimentally impact all areas of a child's life, particularly in the absence of successful intervention techniques (Brinton and Fujuki, 2006). The school environment and clinical settings are common contexts for intervention, but an increasing emphasis on naturalistic channels for intervention is reframing the role of the family in intervention techniques (Friehe, Bloedow, and Hesse, 2003).

The family's role within the context of collaborative interventions involving schools and clinical settings remains ambiguous in empirical literature. The family's role is formidable during language acquisition and is equally important during interventions for communication disorders, but the best practices in supporting and expanding the family's role have not yet been articulated, particularly with respect to multi-context collaborative interventions. This study undertakes a comprehensive review of the literature regarding communication disorders in children, types of interventions for children with these disorders, cultural considerations during intervention and the role of the family in interventions.

This study aims to address these issues by reviewing the pertinent literature, both theoretical and empirical, on communication disorders in children, intervention techniques and cultural considerations during intervention.

## 2. Research Questions:

1. What are the dominant theories in language acquisition, particularly with respect to the role of the family?
2. What are the types of communication disorders that can emerge in children and what types of interventions are employed for these disorders?

3. What cultural issues emerge during intervention and how do professionals deal with these issues?
4. What is the role of the family during interventions and what are the best practices in family-centred interventions?

### **3. Research Methodology**

Qualitative literature reviews are useful with respect to early intervention studies and can be classified according to subcategories of literature review methodology (Hargrove, Lund, and Griffer, 2005). Literature reviews used in intervention studies are generally systematic, narrative or are grounded in meta-analyses (Hargrove, Lund, and Griffer, 2005). All three types are useful for language professionals in making choices and deciding which type of interventions should be employed, as they all support evidence-based practice. This study employs a narrative literature review methodology, searching, analysing and synthesising the scholarly literature on communication-disorder interventions with respect to the family role. Narrative reviews, unlike systematic reviews or meta-analyses, do not identify streamlined criteria prior to searching for studies to be included in the study (Hargrove, Lund, and Griffer, 2005); this creates a disadvantage, in that a wide range of literature, including empirical, theoretical, case study and expository literature, all have the potential to be included in the study.

In this study, it was decided to only use a literature review rather than a 'field-based' questionnaire and interview approach. There were a number of reasons for this and they connected into the ethical considerations that now form a large part of a researcher's concern. Due to the fact that young children were at the heart of this work there are a number of ethical concerns that arise. Observation of children, filming of children or taping of them are all now bound by ethical guidelines.

## 4. Theoretical Literature Review

### 4.1 Communication Disorders in Children: Classification and Assessment

Classification of disorders as ‘language delays’ or ‘language deviance’ emerged as a theme for linguists in the twentieth century. They explored the likelihood that language problems discovered during the pre-school period would persist later life and likely impede written language acquisition (Paul, 2001). The term ‘language delay’ has begun to be phased out in professional literature, as it presumes an ultimate destination for language’s normal functioning exists (Paul, 2001). The term ‘language impairment’ is more neutral and frequently employed, particularly for younger children who may clearly require interventions but would be prematurely labelled as having a named disorder (Paul, 2001). Assessment of communication disorders is generally based on discrepancies with respect to a child’s age. The developmental age of the child is compared to his or her chronological age and attempts are made to not evaluate the cognitive ability of the child based solely on language abilities. Particularly for students with special needs, the mental age of the child is used in order to diagnose language disorders over his or her chronological age; this is done for two reasons: language skills should not be expected to exceed a child’s general level of development, even when that general level is far below the chronological age (Wyant, 2009). Paul (2001) further highlights that language level rarely exceeds non-verbal cognitive levels and the mental age of the child generally sets the pace for language development. Discrepancy-based criteria for assessment of language disorders are also grounded in research needs, as it allows for simpler sampling when a child’s mental age is used.

The complexity of measuring a child’s mental age, however, has generated significant opposition during the past two decades in terms of

using discrepancy-based criteria in diagnosing language disorders. As Paul (2001, 6) notes:

... for one, it is not psychometrically acceptable to compare age scores derived from different tests of language and cognition that were not constructed to be comparable ... Second, there are fundamental problems in using age-equivalent scores at all to determine whether a child's score falls outside the normal range.

There is a general lack of uniformity in language ability in children of the same mental age and the instances in which children's linguistic skills exceed their mental age are particularly problematic when using discrepancy-based criteria to assess and offer interventions (Paul, 2010).

Very recently, researchers and language experts began advocating for use of discrepancy-based criteria as a mere reference point that can aid in determining intervention goals (Paul, 2001). Using instruments that measure both the developmental level and adaptive behaviours, clinicians can match interventions with behaviours most conducive to intervention targeting (Wyant, 2009). Evaluating the current mental age and defining target language behaviours closer to the overall developmental level is known as intra-linguistic profiling, through which semantics, syntax, phonology, non-verbal mental age and motor skills are compared to define which areas are most depressed (Paul, 2001). By extension, interventions can focus first on the areas most in need of attention, before moving on to other aspects of the language disorder. Employing a descriptive-developmental perception of the disorder during assessment, the professional uses the mental age without affording it primary consideration, as the child's individual behaviours and environmental systems are valuable as well (Wyant, 2009). Framing language disorders from a systems' perspective charges clinicians to not assume that all communication disorders exist within the context of a single child but, instead, that they exist in the relationship between the child and those with whom s/he is speaking. Both assessment and intervention, from this

perspective, is done by understanding that solutions would not just involve the child but also his or her environment (Muma and Perigoe, 2010). The child's family is an integral part of his or her environment, and family roles during assessment and intervention are paramount from a systems' perspective, aiding professionals in deciding what constitutes a language disorder and what is merely a language difference (Muma and Perigoe, 2010).

Alternatively, the traditional perspectives for framing language disorders during assessment are less sensitive to cultural diversity. The categorical model, for example, merely classifies types of behaviours as falling under a specific diagnostic label (Wright, 2004). The categorical model for assessment, along with specific disability models, uniformly describe how children fall under a certain categorical umbrella and share similar characteristics; both of these models hold the advantage of being simplistic and clinical. A salient disadvantage, however, is that these models are not holistic and can ignore important variations in language disorders (Muma and Perigoe, 2010).

If the family is to be involved during interventions, consideration of the family's role during assessment is critical as well.

## **4.2 Language Acquisition and the Importance of Language-Rich Environments**

Though theories of language acquisition diverge considerably from one another, children acquire language from the linguistic input they receive from their environments (McDonald, 1997). By extension, the roles played by both hearing and language-rich environments are critical ones, regardless of the theory acknowledged as correct. A clear link exists between the linguistic opportunities that surround the child during the



critical language-acquisition period and his or her communicative competency (Wright, 2004).

The most significant evidence for the prominence of the language-rich environment in language development, however, is that which highlights the experience of late language learners (Casby, 2003). These types of children are usually affected by abnormal circumstances, most frequently severe neglect, and are not exposed to language input during their early years (McDonald, 1997). Children that are entirely deprived of language during the years when language should emerge never gain full mastery of syntax or morphology, even when placed in a language-rich environment later in life (Hellal, 2009). A slow-down occurs in children around the age of five with respect to the ability to decode and recognise linguistic cues and the nature of language acquisition in the brain impedes any successful remedy to a lack of language exposure during the critical early years.

Language theorist B. F. Skinner considered positive language reinforcement as the key to linguistic development. Essentially, the continued reinforcement of grammar and pronunciation by parents would lead to improved vocabulary use by the children. This directly opposed the theories of Chomsky, who advocated the fact that language was acquired and that our brains are essentially hard wired for language learning up to around the age of seven and then it becomes virtually impossible to learn a language. This is somewhat supported by feral children who, when found, have been deprived of language for their formative years: it has been shown that they could not then be re-trained to speak to a 'normal' level in conversation.

Chomsky argued a number of key points, among them being:

- Language is acquired with no apparent effort.
- Language is acquired without any explicit instruction; that is, nobody teaches the child to talk.

- Language is acquired despite ‘stimulus poverty’ (Ornat and Gallo, 2004).

Although Chomsky is stating that no-one, as such, teaches the child to talk, overall, learners need to have access to the surface form of language – composed of prosodic and phonological cues facilitated by auditory processing – in order to acquire spoken language (McDonald, 1997) and the family provides these supports. The same requirements for language-rich environments exist for deaf children with respect to sign language, only it is visual processing that is the prime facilitator in terms of acquisition.

### **4.3 Role of the Family in Supporting Language-Rich Environments during Language Acquisition**

Mounting evidence suggests that exchanges between parents and children are critical during language acquisition (Carson, et al., 2007)). The bulk of these studies are grounded in Vygotsky’s (1933) social-interactionist theory that assumes the naturalistic development of language through socially embedded communication. Skibbe, Behnke and Justice (2004) investigated the importance of mother–child exchanges during the critical language-acquisition period by using annotated storybook reading as a vehicle for these exchanges and concluded that these interactions undoubtedly supported language acquisition and could serve as a useful intervention for children exhibiting early language impairments. Yoder, et al. (2001) emphasise the critical aspect of adult responsiveness to children’s attempts at communication for facilitating language development, with interventions encouraging this type of responsiveness in pre-linguistic stages of development being highly effective as an early intervention strategy. It follows, as Yoder et al. (2001) further posit, that responding to pre-linguistic children’s attempts at communication is paramount in supporting the social context for language development. Two types of adult responses facilitate language acquisition in children; these are non-linguistic and linguistic, with the former type including the imitation

of physical actions and complying with child requests (Yoder, et al., 2001). Linguistic responsiveness includes any type of verbal response to a child's behaviour, such as adult linguistic mapping that frames a child's communication from an adult's perspective (Wright, 2004). Yoder, et al. (2001) studied fifty-eight children who randomly received strategic types of adult responsiveness to child communication, with maternal linguistic and non-linguistic responsiveness proving most effective during language acquisition. Of course, this highlighting of the importance of parental intervention and encouragement does not necessarily mean that Chomsky is wrong: it does not show language is taught, it shows that the child is immersed in a linguistically rich environment.

Language delays in children may be caused by a number of factors and children begin to speak at different ages as there is no absolute set pattern. Carson, et al. (2007) conducted a longitudinal study which examined the link between speech-language delays in children and the level of nurturance in parenting styles, concluding that nurturing parents were more responsive to pre-schoolers' attempts at communication and thus there was a lower incidence of speech delays among children with nurturing caregivers.

## **5. Literature Review of Intervention Methods and the Family Role in Intervention**

The foremost goal of any intervention for communication disorders is to aid the child in becoming communicatively competent (Hyter, et al., 2001). Early identification, early intervention and advances made in supportive technology have all facilitated the academic, social and professional potential of children with communication disorders (Muma and Perigoe, 2010).

### **5.1 Early Childhood Interventions**

Increasing moves towards early intervention for pre-school and even pre-linguistic children have lent greater credence to social

interventions (Bruder, 2010). During early childhood, interventions have the potential of being more successful in supporting language acquisition and the family role is more significant for younger children (Bruder, 2010). Links between communication and the other three domains of cognition, motor and adaptive skills are easier to pinpoint during early childhood, and thus interventions across domain categories are common (Avteresa, 2009). The systems functioning between parent, child and family are complex and professionals aiming to collaborate with these stakeholders are charged to acknowledge the interaction of development with the contexts in which the development is taking place. Interventions during early childhood that focus on communication are as inclusive of the family as possible and particular attention to the social aspect of play occurs during these types of interventions (Johnson, et al., 1999).

Play-based early childhood interventions vary widely in terms of direction, interpretation and length of treatment (Johnson, et al., 1999). When used to address communication disorders, play-based interventions include common elements of play media and the inclusion of family members to support language objectives.

The 2011 ISEI Conference was addressed by Hirsh-Pasek, who strongly advocated early intervention methods, noting how more than cultural demands, there were major socio-economic difficulties with early language control for infants. She noted how early language competence related directly to school progress and readiness and called for the conference to address six major areas in a general appeal for early intervention and readiness:

- The amount of language addressed to children matters;
- Children learn words for things and from events that interest them;
- Children learn best in interactive and responsive environments where they participate in conversations;
- Children learn in meaningful contexts;

- Children need to hear diverse examples of words and language structures;
- Vocabulary and grammatical development are not divorced from each other – even for infants. (Hirsh-Pasek, 2011)

A number of speakers at the ISEI Conference noted the social-deprivation factors that could exclude some families from accepting early intervention and Hirsh-Pasek spoke on the importance of the formative first year before the baby was speaking in the formation of their linguistic understanding.

Excluding families can unwittingly frame a language difference as a language disorder during assessment and equally detrimental issues may exist with respect to cultural diversity during interventions. Both assessments and interventions that are grounded in a systems perspective do not articulate what is ‘normal’ or ‘standard’ in terms of language. Instead, a more holistic approach to assessments and interventions is much preferred, particularly for cultural minorities (Paul, 2001).

Early childhood interventions must pay particular attention to the cultural context in which the communication exists, as home languages and naturalistic settings must be considered for cultural-minority students during both assessment and intervention (Puig, 2010). Puig (2010) highlights that collaborative interventions between educators, parents, SLPs, children and researchers are integral to supporting students of a cultural minority affected by a communication disorder. Puig (2010) used a case-study analysis of an early intervention to give voice to all of these aforementioned stakeholders, emphasising that home-language integration in collaborative interventions is paramount to its success for cultural-minority students.

Puig’s (2010) findings align closely with other research that suggests home-language support is critical for children of bilingual or

diverse language backgrounds (Bernal, 2006; Guiberson, 2005). Guiberson (2005) cites research findings that clearly demonstrate the ineffectiveness of urging a family to choose the population's dominant language to facilitate language development. The author states that extending rather than limiting a child's language resources is preferable during interventions and language diversity should be framed as a strength over a deficit (Guiberson, 2005). His study of bilingual children with cochlear implants suggested that quality interventions that emphasise the home language and collaborative interactions between families and professionals are preferable to those conducted only by the SLP (Guiberson, 2005, 31). In the latter instance, families may feel alienated from both the therapist and the intervention, yielding far less successful outcomes in terms of the child's language objectives. Though the study did not comprehensively explore communication disorders beyond children with cochlear implants, Guiberson (2005) did identify relevant links between culture, collaboration and the role of the family.

Consideration of culture, our third key question for this study, is integral to family-centred interventions (Bernal, 2006). Bernal (2006) conducted a review of literature regarding how ethnicity and culture informs clinical practice in family-centred therapies, concluding that treatment and intervention research has historically under-served diverse populations, particularly with respect to language. Bernal (2006, 169) writes that 'a challenge for our field is the articulation and documentation of how ethnicity and culture play a role in the treatment process and how interventions may need to be adapted or tailored to meet the needs of diverse families.' The ignorance of the cultural dimension in family therapy has limited its efficacy in addressing communication disorders and a total reframing of interventions to include the complexity of human systems is paramount to successful communications therapy (Bernal and Rodriguez, 2009).

Affording attention to culture, however, does not merely refer to ethnicity and the common cultural dimensions of language or religion. According to Bernal and Rodriguez (2009), culture is also inclusive of alternative categories such as gender, sexual orientation and disability. With respect to deaf individuals, for example, movements to frame them as a linguistic minority, rather than merely as having some sort of cognitive impairment, urge clinicians to enhance their communicative ability with respect to sign language rather than speech. Reformulating an inclusive perspective of culture as it informs interventions means addressing theory, practice and research within the context of cultural processes (Bernal and Rodriguez, 2009).

With respect to language interventions, the increasing diversity of national populations warrants collaboration between professionals and families, as collaborative interventions have the power to merge diverse skills and perspectives in order to aid the student in achieving his or her language goals (Hwa-Froelich and Vigil, 2004; Isaac, 2001; Rosa-Lugo and Fradd, 2000). By extension, collaborative interventions are more conducive to cultural minorities. Hwa-Froelich and Vigil (2004) articulate that collaborations are effective only for cultural-minority students when they truly embody equality and a willingness to learn from one another.

A strong influence of culture exists in communication, and cognisance of linguistic and behavioural patterns common to cultures is paramount during interventions for students of cultural minorities (Rosa-Lugo and Fradd, 2000). Children acquire language within a socio-cultural context, and thus early interventions that are culturally sound, including the family during assessment and intermittent evaluation of the intervention's efficacy, are particularly critical. Rosa-Lugo and Fradd (2000) rationalised their study of interventions for cultural-minority students with communication disorders by highlighting that culturally unfamiliar environments can be challenging and impede communication, generating inaccurate assessments and interventions

when the cultural background of the student is not acknowledged appropriately. The authors' theoretical review of literature linking culture to language acquisition clearly demonstrates that a range of language-acquisition theories – and social interaction theories, in particular – suggest that communication within a situational context is the driving force of language development (Rosa-Lugo and Fradd, 2000). Dominant elements of theories supporting the cultural relevance of interventions are the influence of the child's social world, relationships and importance of the primary caregiver in supporting language development.

Within that child's social world there are times when support for the child's indigenous language may not be forthcoming with the impetus to establish English as the main lingua franca. It is important that the child sees that the home language is valued alongside the second language outside of the home and there are now various strategies in place for helping dual-language children to feel comfortable with both tongues: dual-language books, dual-language signs etc. being some examples.

Langdon (1999) conducted a study of pre-school children affected by communication disorders receiving support in the United States and the problems they face during intervention due to their Mexican background. Though the participant pool was small, the research suggested that the primary challenges facing these children during early intervention are the limited number of culturally sensitive assessment instruments, the inability of professionals to deliver culturally sensitive interventions and fragmentation in the decision process that excludes families from interventions (Langdon, 1999). Langdon (1999) highlights that a pitfall of excluding families during either intervention or assessment is an inability to devise learning environments for children that are culturally sensitive and supportive of their native language. Concurring with Langdon (1999), both Huer, et al. (2001) and Withrow



(2008) concluded that early interventions must be able to not only culturally accommodate students of minority backgrounds but must also be aware of their own cultural biases with respect to ethnic diversity. Inclusion of the family during interventions ensures that students will be culturally accommodated, which is why family-centred methods are critical for children with language disorders.

## 5.2 Traditional and Social-Based Interventions

Traditional interventions for children with communication disorders have focused on language structure, using discrepancy-based criteria and categorical labelling to address parts of speech, sentence types and compartmentalised perceptions of language (Dixon and Smith, 2000); these types of interventions tend to ignore younger children. Intervention emphasis during the 1990s and into the twenty-first century, however, has collectively shifted away from a structural emphasis towards a broader use of language functions. Muma and Perigoe (2010) highlight that common intervention types focus on cognitive functions such as representation and mediation, and on communicative functions such as intent and content.

Social interventions rely heavily on the context of culture and the family, using the child's social interactions for both a backdrop and vehicle for language learning. Usually grounded primarily in systems theory, social interventions will use naturalistic settings and parental or peer modelling to support language development or acquisition (Justice and Pence, 2004). Muma and Perigoe (2010, 181) cite that 'children learn language in social communication with conversational partners ... Children watch their peers and compare what they can do with what their peers can do. When they notice that a peer does something, then they are motivated to do that behaviour as well.' Unlike traditional approaches to intervention that correct specific mistakes in language use, social

interventions aim to provide opportunities through which a child's peers or family can produce communication with the child that correspond to specific language objectives. The alternative view would back Chomsky and say that intervention does not change language. This writer has observed a boy aged three who repeatedly says 'eleopter' instead of 'helicopter.' His other speech is very advanced for his years. When adults intervene to 'correct' his mispronunciation he recognises the error and may say 'helicopter' once but then reverts right back the next time. So modelling may only work to an extent.

### **5.3 The Role of the Family in Intervention**

Family-centred interventions focus on the main caregiver's role in facilitating language development. Strategic mentorship of the caregiver by the SLP can afford him/her the skills necessary to support the child during intervention (Muma and Perigoe, 2010). The parent's intent is then central to the intervention and s/he must appreciate the value of purposeful modelling of language.

The linguistic development of a child relies critically on the social engagement s/he has with the caregiver during early interventions, with families able to provide support to the child that does not exist outside of the home (Campbell, 2003).

Family-centred interventions are those that afford the family a more dominant role in the intervention process than alternative strategies that emphasise the professional's role (Shumway, et al., 2007). Early interventions underpin family-centred philosophy and contend that the primary caregiver has the greatest influence over the child during his or her development because they spend the most time with the child (Raspa, et al., 2010).

Matching the cultural background of the guiding professional with that of the family has demonstrated success during early interventions, but barriers continue to exist with respect to family-centred interventions

that even markedly adept and culturally sensitive professionals cannot overcome. Bailey, et al. (1991) conducted a quantitative survey of 142 early intervention professionals, concluding that the family's perception of the value of the intervention was critical to its success. An additional conclusion of the study was that professionals were concerned about logistical barriers to family-centred services, such as lack of training or personnel to deliver high-quality family-centred interventions (Bailey, et al., 1991). Briar-Lawson (1998) corroborated these conclusions in her later study by highlighting that significant capacity building needed to take place within the professional realm in order to meet the requirements of family-centred service delivery. The relevance of capacity building to this study is significant in that educators and SLPs can combine their efforts and support familial roles as often as possible.

Gregg, Rugg and Souto-Manning (2011) articulate the difference between family-centeredness and family-based therapies, citing that family-based practices are generally more collaborative in nature, providing and mediating the provision of resources, support and education to families in order for them to have the knowledge, skills and time to provide their children with language-rich experiences that will promote their language goals. Family-based practices afford the family a prominent role in intervention but diverge slightly from family-centred philosophy; there is more of a focus on the family as an advocate in the child's intervention than as a prime facilitator of the intervention (Gregg, Rugg, and Souto-Manning, 2011). Educators and SLPs, by extension, should be cognisant of the difference between family-centred and family-based interventions, as the former may be less conducive to educational settings.

The primacy of the professional's role in empowering families during family-based interventions is a dominant theme in the literature. Dempsey and Keen (2008) conducted a systematic review of the empirical evidence supporting the professional's role in family-based

interventions, including thirty-five studies that focused on this type of strategy in terms of service delivery and barriers to positive outcomes. The authors suggested that significant differences exist between parent and staff ratings of the family's role in the intervention, with families often perceiving their role as far more minimal than the professional's perception of the family's role. Few studies, according to the authors, indicated a strategic attempt at empowering families to embrace their role in the intervention; this left families consistently feeling overwhelmed and devoid of control in terms of their child's service delivery. The authors cited the frequent use of the Family Empowerment Scale (FES) in measuring parental perceptions of their empowerment across the dimensions of interactions with professionals and their ability to bring about change. Dempsey and Keen (2008) assert that parental competence was often perceived as low by professionals during interventions but parents would perceive themselves as under-supported in their role, which facilitated their lack of competence. The lack of empowerment experienced by families is significant in that it could potentially be the greatest barrier to the family's role during interventions.

Shannon (2004) cites that the most prominent function of the professional within a family-based intervention context is to strengthen and empower families in order to overcome possible environmental barriers to service delivery. The greatest barriers to family-based service delivery were a lack of support with respect to a family's opinions regarding service provision, inaccessibility to professionals in terms of communication and a perceived lack of competence on the part of professionals for families.

Collaboration and empowerment are integral to supporting the family's role during family-based interventions (Thompson, et al., 1997). Given the prominence of the family in supporting a child's linguistic development, collaboration with, and empowerment of families during early interventions is particularly critical to aiding a child in achieving

his/her language objectives. Empowerment occurs when families are collectively confident in their ability to deal with the situation; they have received the information and problem-solving skills necessary to support their expected collaborative role in the intervention process (Thompson, et al., 1997). The lack of channels for empowerment and consistently low perception of family competence in aiding in the intervention are salient barriers to truly family-based interventions. The low levels of empowerment, in particular, are indicative of a lack of collaboration between families and professionals. Bailey, et al. (1992) cite that a total re-conceptualisation of the role of the family is needed during early interventions if professionals are going to move towards a truly family-based role in interventions. Bailey, et al. (1992, 298) further write that 'relinquishing control of decisions about the nature and extent of early intervention services is likely to be viewed as threatening by many professionals.' The significant advantages of family-based interventions for children with communication disorders, however, supports professional transitions away from traditional interventions and towards those that would collaborate with and empower families (Dunst, et al., 1991).

While there is undoubtedly a greater acceptance of the family role in delivering early intervention to children with communication disorders, most services labelling themselves as family-based or family-centred continue to lack channels for collaborating with or empowering families (Tompson, et al., 2000; Watson, et al., 2007). Malone, Manders and Steward (1997) assert that this is due to wide gaps between research and practice, with the research supporting truly family-based approaches but practice remaining bound to therapist-centred strategies that can inadvertently disempower families. The complexity of the family system undoubtedly warrants that professionals are trained in specific channels for empowering families, but having them play an active role in their

child's assessment and intervention is a salient mechanism for supporting empowerment.

Specific mechanisms for enhancing the family's role during interventions include lending credence to parental perceptions of their child's progress during the intervention (Friehe, Bloedow, and Hesse, 2003). Matthews-Somerville and Cress (2005), for example, conducted a longitudinal study of forty-two infants deemed to be at risk for non-speaking, comparing the perceived communication patterns of the children by their parents to clinical assessments of the same patterns. The study had few limitations, and concluded that parents' perceptions reflected greater communicative capacity in the infants than did clinical observations. While a limitation of the study was an inability to articulate whether the difference was attributable to parents' more acute observation of their child or to a child's greater exhibition of communicative competence while in the presence of his or her parents, the study exhibited preferable outcomes when families were involved in the intervention (Matthews-Somerville and Cress, 2005).

Empowerment of families through education is critical if the parents are grieving – facing some sense of loss due to a child's perceived disability – as it may remedy feelings of guilt associated with the diagnosis. Specifically, families may feel they are somehow responsible for their child's disorder, when most communication disorders are caused by external circumstances (Friehe, Bloedow, and Hesse, 2003). Empowerment strategies also focus on relieving anxieties and fears with respect to the child's future by emphasising a focus on the child as an individual and the strength of the family system (Desjardin, 2006).

Families of young children with communication disorders have far more opportunities in the twenty-first century than they did only two decades ago (Desjardin, 2006). A strong link between maternal self-efficacy and the quality of mother-child interactions exists, which could facilitate communicative competence in children (Desjardin, 2006).

Empowerment-based practices raise the self-efficacy of families, as they provide opportunities for them to witness not only their child's progress but also their substantial role in fostering that progress. Specific strategies for involving parents during early interventions include facilitative language techniques such as imitation and expansion, parallel talk, asking open-ended questions and accelerating the child's expressive language development during guided play. Desjardin (2006) studied the utility of empowering thirty-two mothers to use these early intervention practices in young children at risk for communication disorders, concluding that increasing maternal self-efficacy in facilitative language techniques enhances language learning for children with communication disorders.

Mentorship models support collaboration between parents and professionals by affording parents feedback in their role within the intervention. Embedding language techniques within natural environments and daily routines is a skill that can be conveyed during a mentorship as well, and naturalistic settings are particularly critical contexts for language-centred intervention delivery (Wheeler and Griffin, 1997). The manner in which the child perceives language in the home environment is different from that in which the child perceives language in clinical or academic environments; it is more authentically indicative of how the child communicates. Young children with communication disorders tend to have stronger attachments to their primary caregiver than do children with normal language development, which renders the parental role even more paramount during intervention (Calderon and Low, 1998). Overall, the collaborative ties between professionals and families need to be strong in order to foster positive outcomes for the intervention and allow the child to achieve his or her full potential (Ryan, Boxmeyer, and Lochman, 2009).

#### **5.4 Collaboration between Educators, SLPs and Families**

Educators hold the ability to be a critical channel for collaboration between families and SLPs during intervention. Schools are very often

the context for assessment, diagnosis and support for interventions, with teachers playing a pivotal role in ensuring children are receiving the help they need. Children with communication disorders are at risk for developing a range of problems related to social and academic success later in life (Ferreira, 2007) and early childhood educators are particularly important with respect to early intervention strategies (Pakulski and Kaderavek, 2004).

Collaborating between families, educators and SLPs means overcoming barriers related to poor training of educators with respect to communication disorders and professional resistance among both teachers and SLPs emerging from inflexibility due to them taking on traditional roles (Bessette and Wills, 2007). Educators can employ strategies such as strategic phonological awareness, use of visual cues and, most importantly, purposeful creation of a language-rich environment in order to facilitate interventions being conducted largely by families and SLPs (Friedman, 2006). In addition to this language-rich environment, strategies in the classroom should ideally align closely with the child's intervention in naturalistic settings or children of cultural minorities could be unwittingly ostracised (Justice, 2004). Cultural sensitivity is of great importance.

Justice (2004) highlights that teams should consist of families, SLPs and educators in order to enhance the language-richness of all environments in which the child communicates. Justice highlights that educators should develop a language philosophy articulating what language is and why it is important, then design the physical space to have coercive positive power over the quality and quantity of language experiences; for early interventions this means the facilitation of play, open space and the use of dramatic play spaces such as stages or puppet theatres (Justice, 2004). Daily language objectives and strategic partnerships between families and SLPs allow educators to play a prominent collaborative role in facilitating language development, even



though traditional practice patterns do not support channels for collaboration (DePaepe and Wood, 2001). Collaborations between families, educators and speech professionals demonstrate to children the importance of social communication and interpersonal interactions (Carpenter-Aeby and Aeby, 2005); this type of modelling can then also serve as an aspect of the intervention.

The prominence of all of these stakeholders' roles is clear, with families being particularly instrumental during early childhood interventions due to their weighted role during language acquisition and with educators facilitating the child's academic potential. The role of the SLP, however, remains a dominant one even in family-based interventions and many of the professional barriers that need to be overcome in order to sufficiently empower families are inherent to the language profession and not necessarily to that of educators (Stepling, et al., 2007).

Overall, Innovative interventions for communication disorders must still be grounded in evidence-based practice, which makes narrative reviews of literature paramount in bridging the gap between research and practice (Justice and Pence, 2004). A push to make use of interventions for which there is adequate scientific support has the possibility of impeding innovative solutions to language problems, as the longevity of traditional interventions renders them more supported by research than newer potentially more successful types of interventions (Justice and Pence, 2004).

## **6. Discussion, Implications for Practice and Recommendations for Future Research**

### **6.1 Introduction**

Emerging from the literature reviewed herein are several dominant themes linking the prominence of the family's role during language acquisition to the similarly prominent role of the family during interventions for children with communication disorders. Overall, the literature reflects that the socio-cultural context in which language is acquired is supportive of intervention methods, particularly for young children. Additionally, the increasing cultural diversity within the UK supports the use of culturally relevant interventions for communication disorders. The role of the family is paramount during interventions, which renders the apparent barriers that exist to family-based interventions a cause for considerable concern.

### **6.2 Research Question I: Dominant Theories and the Role of the Family**

The first research question related to the dominant theories in language acquisition, particularly with respect to the role of the family. The literature highlighted the dominance of the primary caregiver, most often the mother, during language acquisition from a social-interactionist model of language development (Chakraborty and Stone, 2009). High-quality responsiveness on the part of the caregiver was critical to an infant's acquisition of language and language-rich environments within which the adult responses to the child's attempts at communication were paramount to the development of language (Yoder, et al., 2001, 135). From a systems' perspective, the family is the primary force in language acquisition, and assessments and interventions should therefore afford the family a dominant role (Paul, 2001, 12).

The literature was generally clear with respect to the importance of interaction between the primary caregiver and infant during language acquisition. Yet in applying the theories, it is important to understand that their actual impact may be limited. Chomsky wrote of the language-acquisition device that enabled children to learn a language – it is true that the baby and infant need experience to start the process off, but then they require very little afterwards.

There was minimal evidence that studied primary caregivers other than the mother, and investigating a link between a father's role in language acquisition would be an interesting area of future research. There was additionally no literature suggesting that older siblings had a role in language acquisition and, given the focus on family-centeredness and not mere mother-centeredness during interventions, framing the nature of fathers' and siblings' influence on language development could be an important step in supporting family models of interventions.

### **6.3 Research Question II: Communication Disorders and Interventions**

Paul's (2001) assertion that a systems perspective be employed during both assessment of communication disorders and interventions for those disorders aligns closely with the theoretical literature that supports social interaction between primary caregiver and child as a vehicle for language acquisition. The second research question asked about the link between communication disorders and their interventions, with a wide range of communication disorders being identified in the literature. Paul (2001), however, warned against categorical labelling, particularly for young children, and urged that the term 'language impairment' be used instead of any disorder-type that would emphasise biomedical conditions and ignore possible socio-cultural influences on disorder manifestation. Accordingly, making use of the developmental-descriptive model for assessing language disorders relinquishes pressures on clinicians to use norm-referenced and potentially inapplicable instruments that focus only

on the mental age of the child and the discrepancy between that age and linguistic ability (Paul, 2001). Developmental-descriptive assessments, alternatively, focus on both describing the child's behaviours and linguistic functioning in conjunction with his or her developmental issues. In rejecting categorical labelling of disorders and employing more holistic assessments for diagnosis, the ecological context of the disorder is taken into account.

The types of interventions employed can then parallel with the child as an individual, including his or her family as the surrounding system. Traditional interventions tended to be poorly conducive to young children, as they focused on single language structures rather than on broader linguistic contexts and they largely ignored the family system (Muma and Perigoe, 2010). An overall exclusion of naturalistic settings existed in conjunction with the exclusion of the family and outcomes were consequently less positive than contemporary interventions that focus on the importance of early intervention and family-based strategies (Johnson, et al., 1999).

Early intervention strategies for children with communication disorders are increasingly grounded in play, with child-centred models strengthening the professional-child relationship and family-centred models *not* significantly fortifying the therapeutic relationship. Because play is so pedagogically critical in supporting social and linguistic development, it remains a salient channel for both assessment and interventions for communication disorders (Johnson, et al., 1999). However, the evidence suggesting that children exhibit greater communicative competence when interacting with their primary caregiver would support the use of the filial model of play therapy over the child-centred model (Johnson, et al., 1999). Movements away from child-centred therapy in communication-disorder interventions have been recent, however, and there was an overall lack of literature focusing strictly on family-based interventions for communication disorders.

Interventions seemed to be classified in the literature according to both context and the age of the child, with the bulk of interventions apparently existing in academic settings but conducted by SLPs. An intense focus existed on early intervention for children at risk for developing communication disorders and strong connections between early intervention, the role of the family and cultural diversity were clear in the literature (Bernal, 2006). Precise strategies for intervention seemed to emphasise reading to children and the development of language skills through open-ended questioning and solicited responses within naturalistic settings. An underlying theme in intervention literature was the significant gap between the research asserting the dominance of the family during early intervention and for cultural minorities, and actual practice that may label itself as family-centred but actually fails to address the family's role adequately.

#### **6.4 Research Question III: Cultural Issues, Barriers and Solutions**

The most frequently identified issue with respect to intervention amongst students of culturally diverse backgrounds was the need to reject intervention strategies that would de-emphasise the child's native language. A language-rich environment focuses on expanding channels for language use rather than denying them and thus a best practice in delivering support to students of diverse backgrounds is to remain culturally sensitive during interventions (Guiberson, 2005). Being in a culturally unfamiliar environment can impede communication and cause young children, in particular, to communicatively shut down; undoubtedly, this presents problems during both assessment and intervention.

The most salient method for overcoming cultural barriers is not to view them as barriers at all but instead to reframe linguistic diversity in children as an asset with respect to interventions. For professionals, this means that a purposeful relinquishing of power is needed in order to

afford a greater role to families during service delivery. Guiberson (2005) and Bernal (2006) both identified the potential for professionals to unwittingly alienate the families of children of diverse backgrounds by placing too little emphasis on the native language during intervention. A lack of collaboration between professionals and families was consistently identified as a barrier to achieving language goals; ironically, this was true most often with respect to family-based interventions (Dempsey and Keen, 2008; Desjardin, 2006).

It is not of course just cultural barriers that can cause problems, class barriers are an identifiable obstacle too. Children and families from our poorest estates can feel disconnected from the ‘middle-class’ authorities trying to help them. They may pull away from the system and are falling further behind. Education Secretary, Michael Gove, giving evidence to the House of Commons Select Committee said: ‘Rich, thick kids do better than poor, clever children, and when they arrive at school ... the situation as they go through gets worse’ (Humphrys, 2010 citing Gove). This is why a cultural and class connection needs to be worked upon: the fact that statistically many of our black male youths are struggling in the examination system could connect to linguistic problems and a lack of supportive cultural intervention in the early stages.

### **6.5 Research Question IV: The Role of the Family and Best Practices in Family-Centred Interventions**

The literature suggests that while the role of the family is ideally a prominent one, and that the bulk of empirical evidence supports the dominance of the family role during early childhood interventions in particular, the family is often under-supported during interventions (Dempsey and Keen, 2008). The wealth of literature highlighting family-centred theory and the intentional drive among the research world to support family-based interventions concurrently suggested that professional barriers exist to authentic family-centeredness. In general, these barriers include a lack of empowerment mechanisms for families

existing in parallel with professional perceptions that families are incompetent (Thompson, et al., 1997).

The studies conducted by Dempsey and Keen (2008) and Desjardin (2006) were particularly integral to this study, as they both highlighted the resistance in the language profession to facilitating family-centeredness. Mechanisms for purposeful empowerment of families are then sorely needed, and Desjardin (2006) recommends fervently the use of mentorship programs for parents during interventions. Mentorship strategies between parents and SLPs represent one of the best practices in family-based interventions, as they boost the self-efficacy of the caregiver, generating higher quality language interactions, and also facilitate collaboration between families and professionals.

## **7. Conclusions and Personal Reflection**

In conclusion, all of the research questions were answered to varying degrees, with the latter question related to service collaboration having the narrowest support in the literature. The home is the context in which language emerges and it is thus the context most facilitative of interventions for communication disorders (Muma and Perigoe, 2010). Family-centred interventions in naturalistic settings depend, however, on the support of the family by the professional. Mentoring seems to be one of the critical best practices that emerged from the literature and professionals would do well to support mentoring relationships between SLPs and parents (Desjardin, 2006). Brief training that takes place over short periods of time could significantly improve the family-centeredness of programs, improve the self-efficacy of parents and facilitate absent perceptions on the part of professionals related to familial competency; if professionals train parents themselves in responsiveness strategies, a lack of competency would be due to their own inadequate training. Mentorship would then support perceptions of competency, overcoming one of the greatest barriers to family-centred interventions (Desjardin, 2006). The results of this study clearly reflect a need to support families

during interventions for children's communication disorders and mentorship may be the most valuable channel for doing so.

The implications of this study for SLPs, educators and families are significant in that they reflect a pervasive and perpetuated resistance to family-based practice among professionals. Future research needs to focus on channels for breaking down these barriers and boosting the holistic focus on children as individuals, language as complex and family-centred practice as the foremost type of intervention for communication disorders.

The implications for practice emerging from this study emphasise the need to open channels for collaboration; this burden is on the shoulders of all stakeholders. For example, SLPs need to take strategic steps to decrease resistance in the language field to family-centred service delivery and families need to acknowledge their weighted role in their child's intervention. Educators can facilitate both of these changes, taking steps to communicate with both families and SLPs and foster interpersonal interaction between professionals and families.

This study has added to the research by not only supporting the family's role during interventions for children's communication disorders but also framing that role as paramount. Interventions that do not adequately acknowledge the family's role are jeopardising the child's academic and social success, countering the primacy of the family during language formation.



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