

Discussion

Collaboration between parents and SLTs produces optimal outcomes for children attending speech and language therapy: Gathering the evidence

Inge S. Klatte† , Rena Lyons‡ , Karen Davies§ , Sam Harding¶ , Julie Marshall||†† ,
Cristina McKean#  and Sue Roulstone¶** 

†HU University of Applied Sciences Utrecht, Utrecht, the Netherlands

‡Discipline of Speech and Language Therapy, School of Health Sciences, College of Medicine, Nursing and Health Sciences, National University of Ireland (NUI), Galway, Ireland

§NIHR Greater Manchester Patient Safety Translational Research Centre, University of Manchester, Manchester, UK

¶Bristol Speech & Language Therapy Research Unit, North Bristol NHS Trust, Southmead Hospital Bristol, Bristol, UK

||Health Professions Department, Manchester Metropolitan University, Birley Fields Campus, Manchester, UK

#School of Education, Communication & Language Sciences, Newcastle University, Newcastle upon Tyne, UK

**Faculty of Health and Applied Sciences, University of the West of England, Bristol, UK

††Honorary Research Fellow, School of Health Sciences, University of KwaZuluNatal, South Africa

(Received December 2018; accepted March 2020)

Abstract

Background: Collaboration between parents and speech and language therapists (SLTs) is seen as a key element in family-centred models. Collaboration can have positive impacts on parental and children's outcomes. However, collaborative practice has not been well described and researched in speech and language therapy for children and may not be easy to achieve. It is important that we gain a deeper understanding of collaborative practice with parents, how it can be achieved and how it can impact on outcomes. This understanding could support practitioners in daily practice with regard to achieving collaborative practice with parents in different contexts.

Aims: To set a research agenda on collaborative practice between parents and SLTs in order to generate evidence regarding what works, how, for whom, in what circumstances and to what extent.

Methods & Procedures: A realist evaluation approach was used to make explicit what collaborative practice with parents entails. The steps suggested by the RAMESES II project were used to draft a preliminary programme theory about collaborative practice between parents and SLTs. This process generates explicit hypotheses which form a potential research agenda.

Discussion & Conclusions: A preliminary programme theory of collaborative practice with parents was drafted using a realist approach. Potential contextual factors (C), mechanisms (M) and outcomes (O) were presented which could be configured into causal mechanisms to help explain what works for whom in what circumstances. CMO configurations were drafted, based on the relevant literature, which serve as exemplars to illustrate how this methodology could be used. In order to debate, test and expand our hypothesized programme theory for collaborative practice with parents, further testing against a broader literature is required alongside research to explore the functionality of the configurations across contexts. This paper highlights the importance of further research on collaborative practice with parents and the potential value of realist evaluation methodology.

Keywords: collaborative practice, parents, realist evaluation, speech and language therapy.

What this paper adds

- Current policy in education, health and social care advocates for family-centred care and collaborative practice with parents. Thereby, collaborative practice is the preferred practice for SLTs and parents. In

Address correspondence to: Inge Klatte, HU University of Applied Sciences Utrecht, Heidelberglaan 7, NL-3584 CS, Utrecht, the Netherlands; email: inge.klatte@hu.nl

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

this paper, we explore collaborative practice and use a realist evaluation approach to achieve the aim of setting a research agenda in this area. Researchers use realist evaluation, a methodology originally developed by Pawson and Tilley in the 1990s, to explore the causal link between interventions and outcomes, summarized as what works, how, for whom, in what circumstances and to what extent. Realist evaluation provides a framework to explore configurations between contexts (C), mechanisms (M) and outcomes (O). We used this methodology to take a first step at making explicit what collaborative practice is and how it might be achieved in different contexts. We did this by drafting a preliminary programme theory about collaborative practice, where we made explicit what context factors and mechanisms might influence outcomes in collaborative practice between parents and SLTs. Based on this programme theory, we argue for the need to develop a research agenda on collaborative practice with parents of children with speech, language and communication needs. The steps between a programme theory and a research agenda could entail exploring each CMO, or step in the programme theory, and evaluating it against the existing literature—both within and beyond speech and language therapy—to see how far it stands up. In this way, gaps could be identified that could be converted into research questions that would stimulate debate about a research agenda on collaborative practice. Understanding how collaborative practice can be achieved in different contexts could support SLTs to use mechanisms to optimise collaborative practice intentionally and tailor interventions to the specific needs of families, thereby enhancing collaborative practice between parents and SLTs.

Introduction

The purpose of this discussion paper is to stimulate debate and research on effective collaborative practice with parents of children with speech, language and communication needs (SLCN) in speech and language therapy practice. Families are the centre of learning for children, and in situations where additional support is required for learning language, a family-centred approach is essential. Collaborative practice is identified as a key component in family-centred care and is essential for goal-setting, planning and implementing interventions that address family priorities and needs (Kokorelias *et al.* 2019, An *et al.* 2018). An *et al.* (2016: 1844) defined collaboration as ‘mutually supportive interactions through which knowledge and skills are shared, mutual understandings occur, and shared-decisions are made’. Collaborative practice could be described as having two complementary components (An *et al.* 2018: 260): ‘relational practice (e.g., showing respect and empathy, active listening) and participatory practice (e.g., engaging the family in the intervention process, and incorporating family needs and priorities into intervention)’. The emphasis on collaborative practice is relevant to interventions supporting speech and language development. Working in collaboration with parents, however, can be challenging for speech and language therapists (SLTs) (Klatte and Roulstone 2016, Davies *et al.* 2017). Currently, there is little research about how collaborative practice between parents and SLTs can be achieved.

In order to strengthen understanding of how best to achieve effective collaboration with parents in intervention, this paper uses realist principles to develop a preliminary programme theory and begin to identify core components of collaborative practice. A programme

theory can be developed from existing research, debated within the professional field and evaluated, in order to make explicit how collaborative practice with parents can be achieved in speech and language therapy, taking context and mechanisms into account. In this way, we argue for a reconceptualization of collaborative practice with parents based on the evidence and recommend a research agenda to explore collaborative practice more extensively.

What we already know about collaborative practice between SLTs and parents

The relational practice component of collaboration has gained traction in the speech and language therapy literature and is underpinned by a reciprocal relationship between clients and professionals. For example, a range of terms has been used to represent this relationship, with some focusing primarily on the role of parents, such as ‘parental involvement’ (Watts Pappas *et al.* 2008) and ‘parental engagement’ (Melvin *et al.* 2019, Klatte *et al.* 2019), whilst others used the term ‘co-practice’ to reflect a more reciprocal process (McKean *et al.* 2017). For the purposes of this paper, we adopted the phrase ‘collaborative practice’, shifting the focus from ‘engaging with’ a service or professional, which implies a more one-way relationship and attendance at services, to working together collaboratively through reciprocal relationships to enhance children’s learning (Goodall and Montgomery 2014). This focus on enhancing children’s learning and reciprocal relationships could potentially encourage SLTs, as well as parents, to think differently about how they work together. In our view, collaborative

practice places an equal emphasis on the different, but complementary, roles of both parents and SLTs.

Although the notion of working with parents in partnership/collaboratively has been in existence for many years (Pugh 1987), there is relatively little research about *how* collaborative practice can be achieved with parents in speech and language therapy. SLTs can draw on literature from other professional contexts that provide useful principles for collaborative practice (e.g., An *et al.* 2018). However, contextual and profession-specific factors are likely to have a substantive influence on the success and quality of professional–parent relationships presenting an impetus to investigate the specific SLT–parent collaboration. In a systematic review of interventions for preschool children at risk of developmental speech and language disorders, Roulstone *et al.* (2015) found only one study (Tardaguila-Harth 2007) that attempted to build in a measure of parents' understanding of their role; there were no studies that provided descriptions or evaluations of how collaboration was established as part of an intervention for these children.

Despite the espoused benefits of collaborative practice and the evidence that parent-implemented language interventions can have positive effects on children's language outcomes when compared with control groups (Roberts and Kaiser 2011), there is also evidence to suggest that collaboration between parents and SLTs may be difficult to achieve. For example, collaborative practice may break down when parents are unclear about their roles in intervention, when they undervalue their own role and instead view the SLT as the 'expert' (Carroll 2010, Davies *et al.* 2017, Lyons *et al.* 2010). Parents may come to intervention with preconceived beliefs about language development, causes of language disorder and speech and language therapy services (Marshall *et al.* 2007, 2017) which may not be congruent with SLTs' beliefs and in turn may influence collaboration. Likewise, SLTs come to the intervention process with beliefs and attitudes that will influence their approaches to collaborative practice (Davies *et al.* 2019). In some cases, SLTs may believe they can encourage parents to take an active role in intervention. However, in examining more closely how SLTs express their work, it seems that they assign parents and carers (intentionally or unintentionally) more passive roles (Davies *et al.* 2017, 2019). Parents had a clear conception of their role as advocates for their child but expressed a vague notion of being able to intervene and make a difference in their child's language development. SLTs, on the other hand, articulated a clear role of planning and treating but rarely referred to negotiating roles or enabling parents to be decision-makers during intervention, inevitably assigning a predominantly passive role, or, at best, a helper role to parents (Davies *et al.* 2017, 2019). Furthermore, Klatte and Roulstone (2016) found that implementa-

tion of parent–child interaction therapy (PCIT) differed across therapists and was influenced by organizational constraints as well as family needs and practicalities. The evidence, therefore, overwhelmingly suggests that collaboration is indeed complex and differs according to context that may be very specific to individual parents, children and SLTs.

Evidence suggests that parents may face challenges when working with SLTs. For example, parents may not have time to implement interventions, may find the therapy activities difficult, feel uncomfortable with roles or tasks or may not understand the benefits of the intervention (Justice *et al.* 2015, Kaiser *et al.* 1995, Watts Pappas *et al.* 2008). Sugden *et al.* (2019), in a qualitative study of parental experiences of homework practice with children with speech sound disorders, found that although parents were keen to work with their children, some reported that it was difficult when the SLT did not consider the context of family life and provided suggestions that they considered were unreasonable. Collaborative practice may be even more important when working with families from disadvantaged backgrounds or who are underserved. In these cases, 'interventions are likely to be most effective in engaging parents when designed around the needs, concerns and lifestyles of the populations that they are seeking to reach' (Pote *et al.* 2019: 6). Pote *et al.* (2019) argued that this includes not only viewing families as recipients of interventions but also involving them in the design and implementation of interventions.

Implementing a collaborative approach requires that SLTs have the prerequisite knowledge, skills, attitudes and confidence to collaborate effectively with parents (Klatte *et al.* 2019, Watts Pappas *et al.* 2009). According to Klatte *et al.* (2019), SLTs require training on how to achieve mutual understanding and develop constructive relationships with parents, taking specific parental needs into account, in order to enable them to take up their roles in the intervention process. Increasing it is important that SLTs develop cultural competence in order to provide a sociocultural approach that is tailored to the needs of parents who are from backgrounds that are culturally and linguistically different from those of the SLT (Klatte *et al.* 2019).

In summary, current policies advocate family-centred care and collaborative practice with parents. However, it is important that this aspect of speech and language therapy practice with children is made explicit and supported by a greater body of research. Interventions for children with speech and language disorders are complex, since these interventions contain several interacting components and active ingredients (Craig *et al.* 2008). In order to implement complex interventions in real-life clinical contexts, it is important to find out how change is achieved across a range of contexts (Craig

et al. 2008). It is not clear how collaborative practice with parents is used, in what contexts and with what outcomes. It is important that we gain a deeper understanding of collaborative practice with parents, how it can be achieved and how it can impact on outcomes.

Evaluating collaborative practice with parents: the potential value of using principles from realist evaluation

Wong *et al.* (2017) argued that RCTs provide data on what works on average, but they do not indicate how to maximize impact or where to target resources. They argued that people respond differently to interventions. Therefore, what works for one family in one context may not work for another. The principles of realist evaluation provide a framework to explore systematically the complexity of collaborative practice with parents and a useful structure for framing this discussion and setting a research agenda.

Realist evaluation was originally developed by Pawson and Tilley (1997) in the 1990s to explore systematically the link between interventions and outcomes, summarized as ‘what works, how, for whom, in what circumstances and to what extent’ (Wong *et al.* 2014: 1). There is a range of useful resources on realist evaluation on the RAMESES Projects website (Realist and Meta-narrative Evidence Syntheses: Evolving Standards—RAMESES 1) and the quality and reporting standards and resources and training materials for realist evaluation (RAMESES II).¹

Realist evaluation is a theory-driven approach, that is, one develops a theory of the intervention programme as a basis for the evaluation; in realist evaluation, this ‘programme theory’ is used to explain the mechanisms by which different outcomes are generated in different contexts. Therefore, the programme theory refers to ‘the description, in words or diagrams, of what is supposed to be done in a policy or programme (theory of action) and how and why that is expected to work (theory of change)’ (RAMESES II 2017).

According to the realist approach, programmes provide opportunities and resources to enable changes in thinking and behaviour. In order to understand collaborative practice with parents, it is important to understand the underlying mechanisms that lead to successful outcomes and the specific contextual factors that cause mechanisms to have an effect. Researchers using a realist evaluation approach strive to uncover the hidden mechanisms (M) and to understand the conditions or contexts (C) in which they occur, and the outcomes they generate (O) (Cunningham *et al.* 2018). Marchal *et al.* (2012) described this process of defining CMOs as opening the black box to make causal links more ex-

plicit. RAMESES II (2017) defines context (C) as a set of rules, norms, values and interrelationships that operate and make a difference to the outcomes. These contexts include social, economic and political structures, programme participants and staffing, geographical and historical context. Mechanism (M) is defined as the interaction between what the programme provides (in this case, collaborative practice with parents) and the participants’ reasoning (in realist evaluation this term refers to understanding, values and beliefs of both parents and SLTs) that enables the programme to work. Outcomes (O) refer to the intended and unintended consequences of a mechanism. Given that there are different contexts and mechanisms at play for SLTs and parents, we argue that outcomes may vary, for example, including change in children’s language or in parents’ feelings of well-being.

A realist evaluation is a theory-driven iterative explanation-building process (Wong *et al.* 2012) and is comprised of multiple steps, which include: hypothesizing about CMOs; collecting data from practitioners about the aims of a programme and from clients about experiences of the programme, using qualitative or quantitative methods; analysing data to confirm, refute and refine emerging programme theories; testing theory by looking for disconfirming or contradictory data and alternative interpretations; writing and refining an overall explanatory account; and repeating the process in a different setting with a different cohort. In our view, realist evaluation provides a useful methodology to explore collaborative practice with parents in different contexts; it has been used recently in the speech and language therapy literature regarding the translation of research into practice (Swift *et al.* 2017) and intervention for speech sound disorders (Nicoll 2017).

Aims

The aim of this paper is to set a research agenda on collaborative practice between parents and SLTs in order to generate evidence regarding what works, how, for whom, in what circumstances and to what extent. The paper foregrounds collaborative practice between parents and SLTs with a view to understanding further and optimising outcomes for children with speech and language disorders. We present how the principles of realist evaluation could be used to understand the components of collaborative practice between parents and SLTs. We propose a preliminary programme theory that can be debated, tested and refined. We give examples of CMO configurations based on the existing literature and make suggestions for further research. The intention is to stimulate debate and contribute to the research agenda with regard to collaborative practice with parents of children with speech and language disorders.

Method

Participants

The present authors, all of whom share an interest and have expertise in collaborative practice with parents, formed a research group connected with the COST Action IS1406 'Enhancing Children's Oral Language Skills across Europe and Beyond: A Collaboration Focusing on Interventions for Children with Difficulties Learning their First Language'.² (COST stands for European Cooperation in Science and Technology.) COST Actions are networks dedicated to scientific collaboration that aim to advance science and they provide financial support for meetings, short-term scientific missions and conferences. The aim of the COST Action IS1406 was to enhance the science in the field internationally, improve the effectiveness of services for children with language impairments/disorders and to develop a sustainable network of researchers well placed to investigate the key questions in this area. Collaborative practice with parents was a cross-cutting theme relevant to two working groups in the COST Action: the delivery of interventions for children with language disorders and the social and cultural context of intervention for children with language disorders. The first and second authors took a lead role in the process and consulted with other members of the research team throughout the process.

Overarching method

The process involved iterative cycles of debate, redrafting of models by leads followed by requests for feedback. The steps included the following:

- A research group of speech and language therapy academics experienced in research in collaborative practice ($n = 7$) developed the scope of inquiry for 'SLTs working with parents' to include 'the effects and characteristics of successful parent–SLT collaboration in interventions for children with speech, language and communication needs (SLCN)'. The research group met on four occasions to formulate and refine a programme theory and CMOs, map previous evidence and identify research gaps. Frequent Skype meetings were held to discuss and develop the emerging programme theory and to write a paper to prompt discussion and research in the field of SLT.
- A preliminary programme theory was then developed with regard to the placing of the SLT–parent collaboration component within a model of complex intervention of SLT for children with SLCN. We described ways in which we hypothesized how SLT–parent collaborative practice interacts with other intervention components. We drew here on

the literature on family-centred models as well as our own clinical experience and research on collaborative practice with parents, from the perspectives of both parents and SLTs (Davies *et al.* 2017, 2019, Klatte *et al.* 2016, 2019, Lyons *et al.* 2010, Marshall *et al.* 2007, 2017, McKean *et al.* 2017, Roulstone *et al.* 2015). We also drew on theoretical perspectives about behavioural change (Michie *et al.* 2011), patient activation (Hibbard and Gilbert 2014) and shared decision-making (Elwyn *et al.* 2012). We reviewed what collaborative practice with parents meant, how it might lead to outcomes and drafted visual representations of the collaborative practice process. Gaps in underpinning theory about how collaborative practice is achieved and empirical evidence for collaborative practice were identified. Of note was an absence of detailed testable theories as to the mechanisms that create optimal SLT–parent collaborative practice. We drew upon realist theory and the RAMESES I and II resources, specifically questions from the 'Theory' in Realist Evaluation³ resource to reflect critically on collaborative working with parents, shape our thinking and develop a preliminary programme theory about collaborative working with parents. The first author also attended a one-day training event on realist evaluation methodology facilitated by Wong, who is an expert in this methodology.

- We applied a realist lens to papers about collaboration between SLTs and parents to serve as exemplars and illustrate ways in which a realist approach could be used. These papers were selected because they described different aspects of collaboration between SLTs and parents across a range of contexts, for example, organizational characteristics (service level) and individual characteristics of participants (individual level). We identified potential CMO configurations in these papers that could be used to make mechanisms more explicit and therefore testable.

Discussion

Hypothesized programme theory about collaborative practice with parents

The aim of this paper was to set a research agenda on collaborative practice between parents and SLTs, in order to generate evidence regarding what works, how, for whom, in what circumstances and to what extent. The use of realist principles provided a way to understand further the contexts and mechanisms evident in collaborative practice between SLTs and parents. We proposed a preliminary programme theory which will be

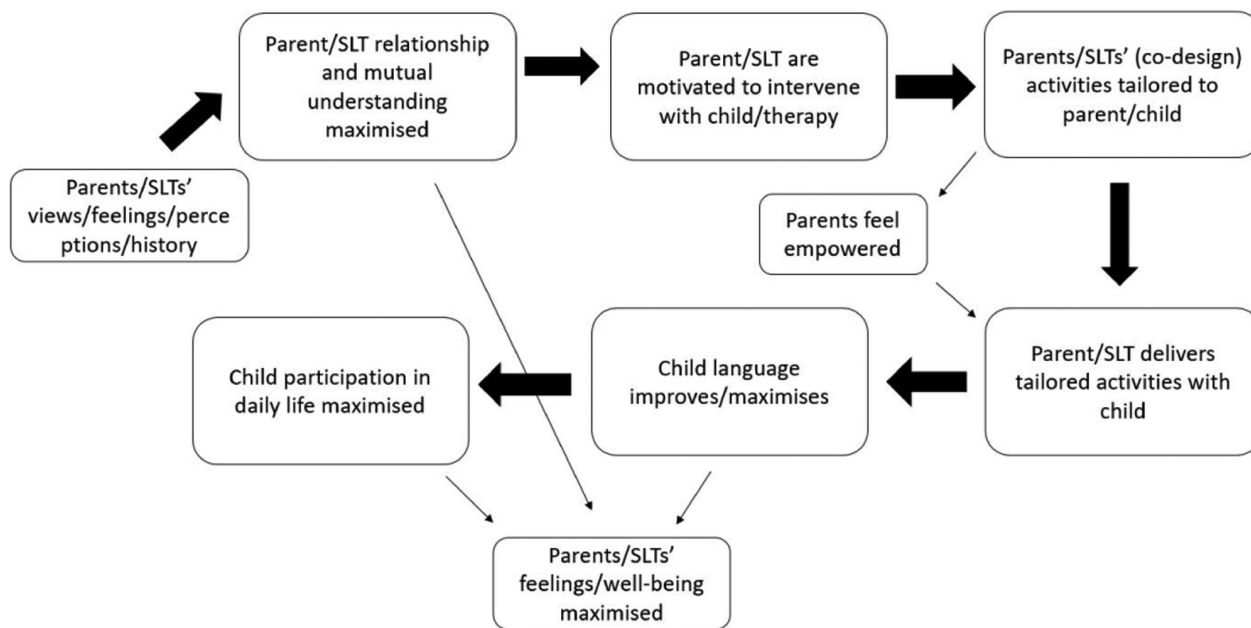


Figure 1. Preliminary programme theory underpinning collaborative practice with parents.

discussed and offer exemplars of potential CMO configurations to illustrate the potential relationships between contexts, mechanisms and outcomes. Programme theory is important because it provides the foundation for future evaluation questions and a research focus. The preliminary programme theory, which focused on parents who do attend and initially engage with speech and language therapy services, is presented in figure 1. We are cognisant that some parents do not engage with speech and language therapy services and, as can be seen below, the process of testing CMOs challenged the preliminary programme theory. In figure 1, bold arrows indicate the main causal mechanisms; light arrows indicate secondary outcomes. Drawing on the literature, we argue that both parents and SLTs come to intervention with understandings, values and beliefs (*reasoning* in realist terms) that may not necessarily be aligned (Marshall *et al.* 2007, 2017, Davies *et al.* 2019). In a collaborative practice model, we argue that if the SLT makes time to have a conversation to explore parental reasoning, then a shared understanding of respective preferences, expectations, roles and responsibilities will be achieved. This mutual understanding will stimulate parents' motivation to work with their child. In realist terms, *resources* (information, time, support and skills) may also need to be aligned, potentially through a process of co-designing activities tailored to the child. This co-design would lead to agreement about how the intervention will be delivered in a way that is tailored to the individual needs and preferences of the family. For example, in some cases it may be agreed by both parties that the intervention will be delivered by the SLT, if that is what works best

for some families. In other cases, it may be agreed that parents become agents of change for their child. Collaborative practice enables parents (the participants) to make informed choices about their behaviour (e.g., interactions with their child). Whether the intervention is delivered by the SLT or parent, as discussed and agreed by both parties, the primary outcome will be improvement in the child's language and participation in daily life. We also argued that there may be secondary outcomes for both the parent and SLT, for example, feelings of well-being for both. The SLTs' role in this preliminary programme theory involves supporting changes in parents' reasoning (e.g., understanding, values and beliefs) and their use of resources (e.g., information, time, skills and support), acknowledging that such changes may be challenging for parents. This may require changes in SLTs' reasoning and use of resources in response to the distinctive interplay of beliefs, knowledge, wishes or competence of the parents (figure 1).

Our preliminary programme theory included consideration of potential contexts, mechanisms and outcomes that could be configured to explore causal links. Table 1 documents the potential contexts, mechanisms and outcomes that may interact with each other. At this point, we are not making inferences about causality between specific configurations of contexts, mechanisms and outcomes, but rather we highlight potential CMOs that may interact with each other. There is not always a clear delineation between context and mechanism. For example, Dalkin *et al.* (2015) argued that resources and reasoning of the agents delivering the intervention (in this case SLTs) can be construed as an inherent part of

Table 1. Potential contexts, mechanisms and outcomes in collaborative practice with parents that warrant investigation

Context	Mechanism	Outcome
<p><i>Service factors</i></p> <ul style="list-style-type: none"> – Capacity: time available/funded/commissioned for working with parents – Experience and skills of SLTs required by the employing organization – Criteria for accessing service – Responsiveness to parental worries 	<p>Setting/service is child friendly, comfortable and accessible</p>	<p><i>Outcomes at service level</i></p> <ul style="list-style-type: none"> – Service runs efficiently – Satisfied families – Commissioning standards achieved
<p><i>Parental factors</i></p> <ul style="list-style-type: none"> – Capacity: time to engage with SLT (e.g., full-time jobs/other caring responsibilities) – Previous experience (e.g., negative experience with healthcare; parents see the therapist as an expert and do not want to question the approach) – Capabilities (e.g., language and literacy level) – Priorities and motivation (e.g., financial problems or relationship problems) – Beliefs (e.g., beliefs about language development, value of intervention) – Feelings (e.g., parent may feel insecure and think that their child's language problem is their fault) – Outlook and preferences (e.g., parent may prefer to follow the therapist's lead) 		<p><i>Outcomes for parents</i></p> <ul style="list-style-type: none"> – Understand children's language needs and how to support development – Develop confidence in supporting child's development – Able to take the lead in adapting learning activities – Increased interaction with child and family – Parents gained responsibility feels like a burden – Therapy might feel intrusive for parents – Frustration with therapy <p><i>Outcomes for children</i></p> <ul style="list-style-type: none"> – Improvements in language outcomes – Improvements in educational progress – Improvements in social inclusion
<p><i>SLT factors</i></p> <ul style="list-style-type: none"> – Capacity: time – Capabilities (e.g., skills to work collaboratively with parents) – Attitudes (e.g., attitude towards working with parents, towards parents who do not want to have an active role in therapy) – Beliefs (e.g., each parent would like to take responsibility for their child's learning) 	<p><i>SLTs' awareness and knowledge</i></p> <ul style="list-style-type: none"> – Awareness that changing thinking and behaviour is difficult and therefore parents need ongoing support – Strengths-based approach: acknowledge what parents are already doing and build on these skills – Awareness that different context factors can be present – Cognisant of parents' expectations – Be aware that a positive relationship is important for effective collaboration – Be aware that collaboration with parents is essential for positive outcomes – Cultural competence <p><i>SLTs' skills</i></p> <ul style="list-style-type: none"> – Communication strategies (e.g., motivational interviewing, negotiating skills) – Questioning skills – Empathy and honesty – How to coach/train parents 	<p><i>Outcomes for SLTs</i></p> <ul style="list-style-type: none"> – Increased confidence in working with families – Increased understanding of how to support early child interaction – Greater work satisfaction – Efficient caseload management

Continued

Table 1. Continued

Context	Mechanism	Outcome
	<p><i>Strategies used by SLT</i></p> <ul style="list-style-type: none"> - Negotiate roles - Explore and discuss expectations, feelings, attitudes and preferences - Tailor therapy to needs of the parents and child - Invest in the therapeutic relationship 	

the mechanism rather than the context. We have included the SLTs in both the context and mechanism columns in table 1, cognisant that their actions may be influenced by these factors, which in turn may influence the outcomes. For example, SLTs may wish to implement collaborative practice but may be unable to do so because of service and time constraints. In other instances, SLTs may not implement collaborative practice because they do not have the knowledge and skills to do so. On the other hand, parental choice to change may be influenced by many factors such as their previous experience, beliefs and attitudes, as well as access to resources. It is entirely plausible that these beliefs, or in realist terms *reasoning*, and the *resources* available to parents may influence outcomes for different parents, in different ways in different circumstances. In order to understand how collaborative practice with parents happens, it is important to make context factors and mechanisms that influence outcomes explicit.

In realist evaluations, context factors, mechanisms and outcomes are configured in causal CMO configurations, which can be tested through an examination of the literature and research. In order to illustrate exemplars of such CMO configurations and how they might be used to further the development of a programme theory of an intervention, we have drawn on published studies of speech and language therapy interventions with children that involved collaborative practice with parents to describe three potential CMO configurations. The first CMO focuses on the impact of organizational characteristics (service level) and the other two focus on the influence of individual characteristics of participants (individual level). We provide these examples of CMOs to stimulate discussion and further research.

CMO 1

Gibbard and Smith (2016) investigated the impact of a locally developed intervention, with a trans-agency approach, on engagement and attendance levels of parents and the language of their preschool children who had language problems. The families were from

a disadvantaged area with low rates of attendance at parent-based group intervention at children’s centres. In consultation with families in this target group, the service added several steps into their existing intervention programme, such as an initial home visit by a children’s centre teacher. The purpose of this initial home visit was to make contact, establish a relationship, encourage attendance, provide information about parents’ role in their child’s language development and answer questions about the intervention. Other added components were weekly reminders of their appointments and collaboration between SLT, children’s centre-qualified teacher and crèche staff. This adapted approach resulted in higher attendance levels of parents and the children’s language levels were improved. The gains made in the children’s language were comparable with the language gains made by children from areas without social disadvantage receiving the traditional parent-based group intervention. Using a realist approach with a focus on the collaborative practice, the hypothesis was that the redesign of the service, in consultation with parents, created an intervention that provided additional information for the parents and provided a foundation for the start of a reciprocal relationship (M), which put them in a position to make an informed decision about attendance. Attendance, in turn, enabled parents to focus on children’s learning and acquire skills in supporting their children’s language development, which in turn lead to improved outcomes for children (O). Therefore, we argue that collaborative practice was one of the important conditions that contributed to the improved outcomes in this context. Gibbard and Smith’s study challenged us to consider the service context of our preliminary programme theory which until this point had focused on collaborative practice with individual families who had already engaged with the service. This research refined our thinking about engaging with services (e.g., attendance) as compared with reciprocal relationships and a focus on children’s learning. It highlighted the importance of developing a service-level CMO configuration, hypothesizing that parents present themselves to services with many different preferences, attitudes,

practical needs and feelings (C). Services that are co-designed with parents to take these different presentations into account (M) will increase the possibility that parents will engage with the service, focus on children's learning and deliver improved outcomes for their children (O).

CMO 2

A second example of a potential CMO configuration for discussion is that at an individual level. Each parent comes to SLT with different understandings, values and beliefs about the process, for example, parents may be anxious and may not be clear about their roles in intervention (C). In this instance, collaborative practice could be enacted through reciprocal conversations to ensure mutual understandings. If the SLT makes space for a reciprocal conversation where both parents and SLTs can explore, negotiate and agree expectations (M), then both parties will have a shared understanding which enables effective co-working (O). Some parents may have expectations that they will be involved in the child's learning and are expecting to take up an active role (C). If the SLT does not enact this mechanism (M) the parent may feel dissatisfied (O). For example, Davies *et al.* (2017), in a qualitative study on parent's conceptions of their role in speech and language therapy, found that some parents did not feel confident to take on an 'intervener role' in therapy (C). Therefore, it is important that SLTs are aware of this possibility (M) so that they explicitly negotiate roles before the intervention begins (M) and encourage parents (M) to conceive of their role as an intervener (O).

CMO 3

A third example of a potential CMO configuration for discussion is that each parent comes to intervention with different priorities, resources and capabilities (C). Collaborative practice may involve the SLT exploring barriers and facilitators to parental implementation of strategies (M). Specific strategies can be negotiated and used (M), depending on parental needs, to ensure that the parent is confident and competent to use the strategies to optimise child outcomes (O). For example, Justice *et al.* (2015), in a study of shared reading in the United States, found that there were barriers to parents using this approach. The context in this study was that the parents were from diverse socioeconomic status backgrounds and it was clear that the intervention worked for some and not for others. For example, there were drop-out rates of 25% and 56% in studies 1 and 2, respectively. The researchers explored implementation barriers (using a range of data collection tools, such as surveys and interviews) with a view to designing spe-

cific strategies addressing these barriers to improve uptake of the service and outcomes for the children. They used a behavioural framework and found that there were groupings of barriers, each of which required a specific response. They mapped the barriers onto theoretically informed behaviour change techniques. For example, in cases where the barrier was about capabilities (C), the researchers used a mechanism of providing supportive and corrective feedback (M). Where the barrier was about lack of skills (C), the mechanism they used was modelling techniques (M). All these mechanisms were triggered by different contexts at the individual level, and the assumption is that they will lead to optimal outcomes for children and parents (O). When a realist approach is applied this study, Justice *et al.* (2015) identified subgroups of participants (C) and explored barriers to implementation (M), with a view to identifying specific theoretically informed behaviour change strategies (M) to maximize outcomes for children (O). This study illustrated specific mechanisms that may be used within collaborative practice.

Conclusions and future research

Current policies in education, health and social care advocate family-centred models and collaborative practice with parents. In this paper, we have taken a first step to opening the 'black box' of collaborative practice between parents and SLTs and argued that it is important that we make the process of collaborative practice explicit so that it can be debated and tested. Further research is required to explore ways in which collaborative practice can influence outcomes, that is, what works, for whom and in what circumstances. In our view, the realist evaluation approach provides a useful methodology to progress this research agenda. It provides researchers and practitioners with a framework and language to describe and explain collaborative practice with parents and a methodology to answer the questions what works, for whom and in what circumstances. Realist evaluation provided a systematic framework to reveal mechanisms between parents and SLTs, that would otherwise remain hidden, and investigate how these interact with contextual factors. We have proposed a preliminary programme theory for collaborative practice with parents and set out some potential contextual factors, mechanisms and outcomes that could be configured and explored in future research.

Realist evaluation is a theory-driven iterative explanation building process. In this paper, we have addressed the first step in the process as outlined by Wong *et al.* (2012), that is, we have presented and preliminary programme theory and hypothesized potential CMOs in order to stimulate discussion. According to Wong *et al.* (2012), the next steps would include: collecting

data from practitioners about the aims of collaborative practice and from parents about experiences of collaborative practice using qualitative or quantitative methods. These data would be analysed to confirm, refute and refine the emerging programme theories about collaborative practice and afford opportunities to create an explanatory account of the process. Foregrounding the concepts of contexts, mechanisms and outcomes in practice enables SLTs to reflect on their work with parents in new ways and begin to gather and document evidence about the CMOs operating in their work. In this way, as a profession we could begin to answer the questions of what works, for whom and in what circumstances.

Acknowledgements



This publication is based upon work from COST Action IS1406 <Enhancing children's oral language skills across Europe and beyond: a collaboration focusing on interventions for children with difficulties learning their first language>, supported by COST (European Cooperation in Science and Technology). **COST description:** COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation. www.cost.eu. **Declaration of interest:** The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Notes

1. See <http://ramesesproject.org/>.
2. See <https://research.ncl.ac.uk/echo/>.
3. From the RAMESES II project; http://ramesesproject.org/media/RAMESES_II_Theory_in_realist_evaluation.pdf/.

References

- AN, M., PALISANO, R. J., DUNST, C. J., CHIARELLO, L. A., YI, C. and GRACEY, E. J., 2016, Strategies to promote family-professional collaboration: two case-reports. *Disability and Rehabilitation*, **38**, 1844–1858. <https://doi.org/10.3109/09638288.2015.1107763>
- AN, M., PALISANO, R. J., YI, C., CHIARELLO, L. A., DUNST, C. J. and GRACEY, E. J., 2018, Effects of a collaborative intervention process on parent-therapist interaction: a randomized controlled trial. *Physical & Occupational Therapy in Pediatrics*, **39**, 259–275. <https://doi.org/10.1080/01942638.2018.1496965>
- CARROLL, C., 2010, It's not every day that parents get a chance to talk like this: Exploring parents' perceptions and expectations of speech-language pathology services for children with intellectual disability. *International Journal of Speech-Language Pathology*, **12**, 352–361. <https://doi.org/10.3109/17549500903312107>
- CRAIG, P., DIEPPE, P. A., MACINTYRE, S., MICHIE, S., NAZARETH, I. and PETTICREW, M., 2008, Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*, 2008, **337**, a1655. <https://doi.org/10.1136/bmj.a1655>
- CUNNINGHAM, U., WARD, M. E., DE BRÚN, A. and MCAULIFFE, E., 2018, Team interventions in acute hospital contexts: a systematic search of the literature using realist synthesis. *BMC Health Services Research*, **18**, 536. <https://doi.org/10.1186/s12913-018-3331-3>
- DALKIN, S. M., GREENHALGH, J., JONES, D., CUNNINGHAM, B. and LHUSSIER, M., 2015, What's in a mechanism? Development of a key concept in realist evaluation. *Implementation Science*, **10**, 49. <https://doi.org/10.1186/s13012-015-0237-x>
- DAVIES, K. E., MARSHALL, J., BROWN, L. J. E. and GOLDBART, J., 2017, Co-working: Parents' conception of roles in supporting their children's speech and language development. *Child Language Teaching and Therapy*, **33**, 171–185. <https://doi.org/10.1177/0265659016671169>
- DAVIES, K.E., MARSHALL, J., BROWN, L.J. and GOLDBART, J., 2019, SLTs' conceptions about their own and parents' roles during intervention with preschool children. *International Journal of Language & Communication Disorders*. <https://doi.org/10.1111/1460-6984.12462>
- ELWYN, G., FROSCHE, D., THOMSON, R., JOSEPH-WILLIAMS, N., LLOYD, A., KINNERSLEY, P., CORDING, E., TOMSON, D., DODD, C., ROLLNICK, S., EDWARDS, A. and BARRY, M., 2012, Shared decision making: a model for clinical practice. *Journal of General Internal Medicine*, **27**, 1361–1367. <https://doi.org/10.1007/s11606-012-2077-6>
- GIBBARD, D. and SMITH, C., 2016, A transagency approach to enabling access to parent-based intervention for language delay in areas of social disadvantage: A service evaluation. *Child Language Teaching & Therapy*, **32**, 19–33. <https://doi.org/10.1177/0265659014567785>
- GOODALL, J. and MONTGOMERY, C., 2014, Parental involvement to parental engagement: a continuum. *Educational Review*, **66**, 399–410. <https://doi.org/10.1080/00131911.2013.781576>
- HIBBARD, J. and GILBERT, H., 2014, Supporting people to manage their health: An introduction to patient activation. Ideas that change healthcare. The King's Fund.
- JUSTICE, L. M., LOGAN, J. R. and DAMSCHRODER, L., 2015, Designing caregiver-implemented shared-reading interventions to overcome implementation barriers. *Journal of Speech, Language, and Hearing Research*, **58**, S1851–S1863. https://doi.org/10.1044/2015_JSLHR-L-14-0344
- KAISER, A. P., HEMMETER, M. L., OSTROSKY, M. M., ALPERT, C. L. and HANCOCK, T. B., 1995, The effects of group training and individual feedback on parent use of milieu teaching. *Journal of Child Communication Disorders*, **16**, 39–48. <https://doi.org/10.1177/152574019501600206>
- KLATTE, I. S., HARDING, H. and ROULSTONE, S., 2019, Speech and Language Therapists' views on parents' engagement in Parent Child Interaction Therapy. *International Journal of Language & Communication Disorders*. <https://doi.org/10.1111/1460-6984.12459>
- KLATTE, I. S. and ROULSTONE, S., 2016, The practical side of working with parent-child interaction therapy with preschool children with language impairments. *Child Language Teaching and Therapy*, **32**, 345–359. <https://doi.org/10.1177/0265659016641999>
- KOKORELIAS, K. M., GIGNAC, A. M., NAGLIE, G. and CAMERON, J. L., 2019, Towards a universal model of family centered care: a scoping review. *BMC Health Services Research*, **19**, 564. <https://doi.org/10.1186/s12913-019-4394-5>
- LYONS, R., O'MALLEY, M., O'CONNOR, P. and MONAGHAN, U., 2010, 'It's just so lovely to hear him talking': Exploring the early-intervention expectations and experiences of parents. *Child Language Teaching and Therapy*, **26**, 61–76. <https://doi.org/10.1177/0265659009349975>

- MARCHAL, B., VAN OLME, J., HOERÉE, T., KEGELS, G. and VAN BELLE, S., 2012, Is realist evaluation keeping its promise? A review of published empirical studies in the field of health systems research. *Evaluation and Program Planning*, **18**, 192–212. <https://doi.org/10.1177/1356389012442444>
- MARSHALL, J., GOLDBART, J. and PHILLIPS, J., 2007, Parents' and speech and language therapists' explanatory models of language development, language delay and intervention. *International Journal of Language & Communication Disorders*, **42**, 533–555. <https://doi.org/10.1080/13682820601053753>
- MARSHALL, J., HARDING, S. and ROULSTONE, S., 2017, Language development, delay and intervention—the views of parents from communities that speech and language therapy managers in England consider to be under-served. *International Journal of Language & Communication Disorders*, **52**, 489–500. <https://doi.org/10.1111/1460-6984.12288>
- MCKEAN, C., LAW, J., LAING, K., COCKERILL, M., ALLONSMITH, J., MCCARTNEY, E. and FORBES, J., 2017, A qualitative case study in the social capital of co-professional collaborative co-practice for children with speech, language and communication needs. *International Journal of Language & Communication Disorders*, **52**, 514–527. <https://doi.org/10.1111/1460-6984.12296>
- MELVIN, K., MEYER, C. and SCARINCI, N., 2019, What does 'engagement' mean in early speech pathology intervention? A qualitative systematised review. *Disability and Rehabilitation*. <https://doi.org/10.1080/09638288.2018.1563640>
- MICHIE, S., VAN STRALEN, M. M. and WEST, R., 2011, The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, **6**, 42. <https://doi.org/10.1186/1748-5908-6-42>
- NICOLL, A., 2017, Speech and language therapy in practice: a critical realist account of how and why speech and language therapists in community settings in Scotland have changed their intervention for children with speech sound disorders (Unpublished PhD). University of Stirling.
- PAWSON, R. and TILLEY, N., 1997, *Realistic Evaluation* (London, United Kingdom: Sage).
- POTE, I., DOUBELL, L., BRIMS, L., LARBIE, J., STOCK, L. and LEWING, B., 2019, Engaging disadvantaged and vulnerable parents. An evidence review. [online] Available at <https://www.eif.org.uk/files/pdf/engaging-disadvantaged-vulnerable-parents-summary.pdf> [accessed 1 June 2019].
- PUGH, G., 1987, *Partnership in Action: Working with Parents in Pre-School Centres* (London: National Children's Bureau).
- RAMESES II., 2017, The quality and reporting standards and resources and training materials for realist evaluation [Online]. Available: <http://ramesesproject.org/> [Accessed on 21 December 2018].
- ROBERTS, M. Y. and KAISER, A. P., 2011, The effectiveness of parent-implemented language interventions: a meta-analysis. *American Journal of Speech–Language Pathology*, **20**, 180–199. [https://doi.org/10.1044/1058-0360\(2011/10-0055\)](https://doi.org/10.1044/1058-0360(2011/10-0055))
- ROULSTONE, S.E., MARSHALL, J. E., POWELL, G. G., GOLDBART, J., WREN, Y. E., COAD, J., DAYKIN, N., POWELL, J. E., LASCELLES, L., HOLLINGWORTH, W., EMOND, A., PETERS, T. J., POLLOCK, J. I., FERNANDES, C., MOULTRIE, J., HARDING, S. A., MORGAN, L., HAMBLY, H. F., PARKER, N. K. and COAD, R. A., 2015, Evidence-based intervention for preschool children with primary speech and language impairments: Child Talk—An exploratory mixed-methods study. *Programme Grants for Applied Research*, **3**(5) ISSN 2050–4322.
- SUGDEN, E., MUNRO, N., TRIVETTE, C. M., BAKER, E. and WILLIAMS, A. L., 2019, Parents' Experiences of Completing Home Practice for Speech Sound Disorders. *Journal of Early Intervention*, **41**, 159–181. <https://doi.org/10.1177/1053815119828409>.
- SWIFT, M. C., LANGEVIN, M. and CLARK, A. M., 2017, Using critical realistic evaluation to support translation of research into clinical practice. *International Journal of Speech–Language Pathology*, **19**, 335–343.
- TARDAGUILA-HARTH, J. M., 2007, Assessing the Effects of Dialogic Reading on the Oral Language Skills of Migrant Preschoolers at Risk for Reading Difficulties, PhD thesis, Gainesville, FL: University of Florida.
- WATTS PAPPAS, N., MCLEOD, S., MCALLISTER, L. and MCKINNON, D. H., 2008, Parental involvement in speech intervention: A national survey. *Clinical Linguistics & Phonetics*, **22**, 335–344. <https://doi.org/10.1080/02699200801919737>
- WATTS PAPPAS, N. and MCLEOD, S. L., 2009, Working with families in speech–language pathologists work with families. In N. Watts Pappas and S. McLeod (eds), *Working with Families in Speech–Language Pathology* (Abingdon: Plural Publishing), pp. 1–38.
- WONG, G., GREENHALGH, T., WESTHORN, G. and PAWSON, R., 2012, Realist methods in medical education research: what are they and what can they contribute? *Medical Education*, **46**, 89–96. <https://doi.org/10.1111/j.1365-2923.2011.04045.x>
- WONG, G., GREENHALGH, T., WESTHORN, G. and PAWSON, R., 2014, Development of methodological guidance, publication standards and training materials for realist and meta-narrative reviews: the RAMESES (Realist And Meta-narrative Evidence Syntheses—Evolving Standards) project. *Health Services and Delivery Research*, **2**, 1.
- WONG, G., WESTHORN, G., GREENHALGH, J., MANZANO, A., JAGOSH, J. and GREENHALGH, T., 2017, Quality and reporting standards, resources, training materials and information for realist evaluation: the RAMESES II project. *Health Services and Delivery Research*, **5**.