



# What is the future of research on language and communication needs and mental health?

A report by the Special Interest Research Group for Language, Communication and Mental Health

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## VICKI, PARENT OF A CHILD WITH DEVELOPMENTAL LANGUAGE DISORDER

Hello, my name is Vicki and I am mum to a wonderful, funny and caring little boy called Jack who has DLD (Developmental Language Disorder). Jack's DLD makes his communication very tricky sometimes, as he struggles to communicate and express himself in a neurotypical way. DLD is just one of many disorders such as autism and ADHD, to name but a few that can affect a child's language and communication skills.

Unfortunately having a disorder such as DLD can leave children like Jack vulnerable to mental health issues. It can leave them feeling different and isolated from their peers. Jack has frequently referred to himself as stupid and it breaks my heart when I hear him say this. By the very nature of their disorder, children are unable to voice the feelings they may be suffering inside with, and are often unable to understand and process the emotions they are feeling. With Jack the struggle he has with his emotions almost went under the radar, as he was unable to voice them and violent outbursts were the norm, which left me feeling confused and worried as to why they were happening. Of course, a neurotypical person would say I'm feeling angry, sad, worried about this, but Jack is unable to process and voice these emotions like a neurotypical person and instead the fear and frustration builds inside and erupts into violent behaviour.

I worry for Jack's future, as statistically children with poor mental health are more likely to have behavioural problems during their teens and into adulthood leading to crime and drug problems. I've been lucky because Jack now attends a school that can cater for his needs, and he receives occupational therapy and speech and language therapy as part of his Education Health Care Plan. To get the help Jack needed took two years, and was like an emotional rollercoaster for me. I felt like I was fighting the system all the way through the process. I would like for all children with disorders that effect speech, language and communication to have better access to early mental health intervention, with an understanding of their specific needs in a more timely and easier way, so that they can get the help they need to be able to process the emotions that we all feel.

## EXECUTIVE SUMMARY

Children and young people with language needs are over-represented in mental health settings, and children with these needs have on average poorer mental health and social outcomes. However, many questions remain unanswered about why this relationship exists, and what can be done about it.

The Special Interest Research Group on Language, Communication and Mental health aimed to find out:

- What research is needed on the broad topic of “Language, Communication and Mental health”?
- What are the views of clinicians, families and people affected by language and communication problems on research needs?
- What gets in the way of this research being done?
- What can help get this research done?

Using online surveys and workshops, we heard what research people wanted.

### ***What research is needed***

A range of different groups were mentioned as requiring further research, including children and young people affected by Developmental Language Disorder, autism, who had language problems in the context of broader cognitive difficulties, and who were from vulnerable populations known to be at increased risk of language needs (e.g. young offenders, looked after children). People also made the case for looking at the role of language and communication in mental health across all children, even those not affected by specific diagnoses.

People had questions about why language and mental health are related to each other. What can explain their association? They suggested investigating a range of cognitive and biological reasons, and factors in children and young people’s environments that could explain this link.

People also wanted to see research on clinical and practical applications. This research would generate evidence-based practices, including how we can better detect speech, language and communication needs in mental health settings, and improve interventions for these children and young people. Research could also help us to understand how to support the professionals that work with children and young people with language problems.

### ***Challenges to this research***

For researchers to answer these questions, they will need to overcome several challenges. Future research will need to bring together different professions and disciplines. These groups might not work together often, and may have different terms and approaches to the issues of language, communication and mental health. In terms of participants, this research needs to reach everyone, not just some people with certain language or mental health needs. Research should be careful not to exclude people who were wary of professionals and researchers, or people who want to take part in research, but find the process inaccessible, because of the demands on written and spoken language. We need dedicated research efforts to understand the experiences and views of young people with speech, language and

communication needs. Research will also need to carefully consider the measurement of both mental health and language abilities. Finally, to answer some questions, we need a lot of data, and potentially studies that follow groups over many years.

***Promoting and supporting research in the future***

Our report highlights the need for research investment in this area. We need ambitious projects that look at why language and mental health are associated, and what changes are needed in current practice. While there are many research opportunities in this topic, we emphasise the need for research that will quickly improve clinical outcomes from the large number of children who have both language and communication problems, and mental health needs. Research investment in this area has the potential to make a difference to many families and young people, who have language problems but who still need access to mental health support. We highlight innovative examples of how some people are already tackling the challenges to doing this research. We also propose new ways forward that can help make this research a reality.

[A video summary of our report is available online.](#)

## BACKGROUND

### What were the aims of this report?

This report summarises the activities, findings and reflections of the Special Interest Research Group on Language, Communication and Mental health. The organising group for this project included: Dr Hannah Hobson (University of York, lecturer in psychology), Dr Melanie Forster (University of York, clinical psychologist), Melanie Cross (speech and language therapist) and Vicki Jeffries (parent of a child with Developmental Language Disorder).

This group's activities were funded by Emerging Minds to investigate and formulate the future of research on the topic of language, communication and mental health. This report outlines the key messages we heard from our stakeholders and our reflections and suggestions. This includes what future research should focus on, what potential barriers there are to doing the research, and ways to overcome these challenges.

### Who is this report for?

This report is particularly relevant to:

- Academic researchers, particularly those working in the field of mental health, psychology, education and/or language and communication.
- Research organisations, including funding bodies and charities who fund research, and universities and research institutes.
- Organisations that represent relevant stakeholders, for example charities that support children and young people with mental health problems or speech, language and communication needs.
- Professional bodies such as those that represent psychologists, psychiatrists, educational professionals and speech and language therapists.

Individuals affected by language and communication problems, or mental health needs, and their families may also wish to read our report to understand what ideas are being considered as targets for future research. [We have a video summary of this report, if families and individuals would prefer to access our findings this way.](#)

### What are “Speech, Language and Communication Needs”?

Speech, Language and Communication needs (SLCN) include problems understanding language (making sense of what people say), using language (words sentences, telling stories and giving explanations), and knowing how to take part in conversations in the right kind of way (social communication). **SLCN is an umbrella term that includes a range of difficulties and diagnoses.** Language disorders can also be associated with conditions, such as autism, ADHD, brain injury, genetic conditions for example Down's syndrome, and sensori-neural hearing loss. In addition, SLCN includes conditions that remain poorly known about by the general public, such as Developmental Language Disorder (DLD). DLD is a type of SLCN that affects the way that people understand and use language, and affects 7.58% of the population (1).

*The term speech, language and communication needs (SLCN) describes difficulties across one or many aspects of communication... Some SLCN are short term and can be addressed through effective early intervention. Others are more permanent and will remain with a person throughout their childhood and adult life. – Royal College of Speech and Language Therapists (2)*

Our report considers children and young people with SLCN in particular, but it is important to note that research about the topic of language, communication and mental does not just have to be that which includes children with known SLCN. Rather, we could also ask **what is the role of language and communication skills for children without an SLCN?** Do children with stronger language skills fare better in some types of therapy, for example?

### What did we mean by “mental health needs”?

When young people begin to experience concerning emotional and behavioural difficulties outside the normal range of what we might expect for their age and development, we often consider them to be experiencing mental health problems. These often represent an increase in the intensity, frequency and persistence of behaviours, thoughts and feelings that many young people experience.

*“Mental health is defined as a state of wellbeing in which every individual recognises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community.”*  
(World Health Organisation, August 2014)(3)

A young person’s mental health status falls across a large spectrum of experiences. At one end of the spectrum are young people who experience good emotional wellbeing and resilience which helps them cope and manage effectively with everyday stresses of typical life. Some young people, however, may experience difficulties within their social, emotional and behavioural wellbeing which can lead to some ongoing challenges within their development and functioning, and possible experiences of periodic, generally short-lived mild mental health concerns.

Social, emotional and behavioural challenges may include:

*withdrawal, low motivation, friendship difficulties, low self-esteem, mood swings, restlessness, reluctance to speak, task avoidance*

At the opposite end of the spectrum are young people who experience diagnosed mental health disorders which are more enduring, intense and challenging in their unhelpful impact upon the young person’s wellbeing, development and functioning in life.

A mental health disorder should be diagnosed by specialist mental health trained practitioners, and can include a range of challenges that are considered serious with a longer term, negative impact for the young person. These can include:

- Disorders that impact upon emotional mood (such as anxiety or depression)
- Disorders that impact upon behaviour (such as conduct disorder)
- Disorders that impact upon attention and activity (such as Attention Deficit Hyperactivity Disorder)
- Disorders that impact upon relationships (such as attachment and trauma related disorders)
- Other difficulties (such as eating disorders and Tourette's disorder)

Prevalence studies suggest that around 16% of all school aged children and young people (from five to 16 years) have a probable mental health disorder (4). We know that young people with SEND (Special Educational Needs and Disabilities; or Additional Learning Needs or Additional Support Needs, as they are referred to in Wales and Scotland) are much more likely to develop mental health problems, than those without SEND. Diagnosing and then effectively supporting a mental health disorder in young people with complex or profound learning and communication needs can be difficult, often leading to many young people's mental health needs going unrecognised (5).

### What we already know about SLCN and mental health

Existing evidence shows that **children with language problems are at increased risk for poor mental health outcomes**, and that **language problems are over-represented in samples of children with social, emotional and mental health needs**.

- 81% of children with emotional/behavioural disorders have below average language proficiency (6)
- Half of children in mental health settings meet criteria for a language impairment (7), and a third of children referred solely for emotional disturbances have an unsuspected language problem (8)
- Children with language needs have increased anxiety and depression (9), and those with a history of language disorder twice as likely to have mental health difficulties (10).

However, this does not mean that all children and young people with language needs will have poor mental health outcomes, and indeed some children and young people with SLCN will not experience problems with their mental health (11). This is important because it suggests that **having a language problem does not determine that you will have mental health problems for definite**, and suggests that there are **protective and risk factors** at play. If we can understand these factors, we could prevent or reduce mental health problems in children and young people with SLCN.

### What we wanted to find out and what we did

We wanted to find out what research topics young people with language needs, their families and the professionals that work with them, would like investment in.



We consulted stakeholders via online workshops and surveys. Our stakeholders included: young people with SLCN themselves, their parents, professionals that support them (including mental health practitioners, speech and language therapists, educational professionals, and others), and academics who work on this topic. We held four online workshops, with the final workshop being exclusively for parents of children with SLCN (this was at the advice of our parent representative who noted that parents may feel intimidated to come to sessions with academics and professionals present). In total, we had 86 survey respondents, and 32 workshop attendees. Two young people with SLCN were also consulted by their parents or speech and language therapist.

## OUR FINDINGS - TARGETS FOR FUTURE RESEARCH

Looking across our responses from our stakeholders, we have developed a framework for what topic areas appear to be priorities for future research. We break these ideas up into three broad areas.

The first area considers **“who”** was being mentioned by our stakeholders. By this, we mean what populations were being mentioned? Were specific diagnoses being referred to, or if not diagnosed conditions, were certain groups of children and young people mentioned (e.g. different ages, different vulnerabilities, or different backgrounds)?

The second area considers what potential mechanisms could be linking mental health and language. These ideas speak to the notion of the existence of a scientific model that could explain how language and mental health affect each other, and what factors link them together, essentially asking **“why”** language and mental health are associated.

The third area is about the clinical and practical applications that research could focus on, which we summarise as **“what now”**. This area focuses on generating evidence-based practices, including how we can better detect SLCN in mental health settings, improve interventions for SLCN, and understand how to support the professional groups that work with these children.

Throughout the report, we include quotes from our survey respondents, workshop attendees, and consulted young people.

### The “Who”: Populations, problems and participant factors to investigate

*“Anyone with a language problem can have any mental health problem, or experience a distressing life event. Language problems do not happen in a bubble.”* – Workshop attendee, Speech and language therapist

As mentioned earlier, SLCN is an umbrella term for lots of different types of needs. The SLCN groups that were mentioned by our stakeholders were varied. Sometimes people simply talked about children with SLCN or language problems, meaning a wide variety of different groups. Some however did mention specific groups, including:

- Developmental Language Disorder
- Deaf/hearing impaired people

- Autism Spectrum Conditions
- Conditions that primarily affect speech (e.g., stammering, verbal dyspraxia)
- Other health conditions in which speech or language is affected (e.g. cerebral palsy)

Stakeholders also mentioned those with language delay, or children who are late to start talking (“late talkers”), and also noted that reading problems are often associated with language problems, and could reflect unrecognised language needs. Some ideas were not focused on a particular “problem” with language, but rather the role of variance in everyone’s language in their mental health and wellbeing: that is, even in non-clinical groups, children with better language and communication skills might fare better in their mental health and wellbeing outcomes.

Similarly, while some people spoke generally about mental health or mental wellbeing, some also mentioned specific mental health diagnoses or symptoms of poor mental health. These included:

- Other neurodevelopmental conditions, such as ADHD
- Common mental health conditions, such as depression or anxiety
- Self-harm, self-esteem and suicidality
- Conditions such as Obsessive Compulsive Disorder, Post-Traumatic Stress Disorder, Psychosis, or Personality Disorders
- Substance abuse problems
- Conditions in which language or communication problems form part of the picture, such as selective mutism, or Tic Disorder/Tourette’s Syndrome
- The experience of childhood trauma

Some people also mentioned issues that are not mental health conditions, but can be considered adverse outcomes. These included things such as homelessness, and offending behaviour.

In discussions with our stakeholders, we unpacked how helpful it was to focus on certain diagnoses. Some stressed that some groups had been historically under-researched (e.g. children and young people with DLD have received comparatively less research than children and young people with autism). However, others noted that more recent evidence supports a **“transdiagnostic” approach to research and practice**. This approach questions the structure of diagnoses, highlighting the common comorbidity across different diagnoses, and shared cognitive and neurobiological bases. Future research may thus want to move away from focusing on particular conditions of interest, rather focusing on problems common across different traditional diagnostic groups, in a transdiagnostic approach.

*“We discussed the application and usefulness of a transdiagnostic approach as a way to get around labelling children, looking much more at a profile of challenges, strengths and vulnerabilities, rather than spending time trying to attach a particular diagnostic label to a child, especially in children with language and communication problems where there are often grey areas between diagnoses. Services devote resources to attaching a particular diagnostic label but not doing this would free up time and money, if we could look at a much more transdiagnostic approach.”* – Workshop attendee, Speech and language therapist

Aside from SLCN and mental health conditions, other factors emerged with regards to “who” needs more research investment. These factors included:

- **Those with undiagnosed or undetected needs.** While a difficult group to study, it was felt that those who had not had their issues recognised were likely to have the poorest outcomes. Indeed, some SLCN might be harder to detect than others, with some being more “invisible”. For example, speech problems might be more readily detected than issues affecting comprehension.
- **Looking across the lifespan.** Some respondents mentioned early preventative approaches/early life environments, others focused on the school years and adolescence, and some were relevant to early adulthood. This highlights the need not to concentrate research efforts at one particularly time point but to generate evidence that can be used to support individuals of all ages.
- **Vulnerable populations,** for instance looked after children, young people who were carers themselves, mothers, and those who have been abused. Homeless and young offender populations could also be considered particularly “vulnerable” populations. Other groups might be at a socioeconomic disadvantage, which might make them more vulnerable. “Hard to reach” families and families in which parents or siblings are known to have SLCN were also important target groups: these could be families who are at risk of not spotting children’s SLCN themselves.
- **Cultural and language factors,** such as black, Asian and minority ethnic and bilingual/multilingual communities. Traveller communities were also mentioned. There was some discussion in our workshops about whether these groups represented a different population to that covered by our main topic of language, communication and mental health. Learning English as an additional language is not a “language disorder”. However, being bilingual can complicate the diagnosis of SLCN, and we already know that certain ethnic and cultural groups face additional barriers to receiving mental health support. In practice, clinicians and educators will have to be able to support children with a diverse range of cultural and language backgrounds. Including this factor serves as a reminder that research needs to represent everyone.
- **SLCN and LGBTQ+ communities.** Some stakeholders reported experiences with social communication issues in transgender people, and experiences with children and young people with pragmatic language needs presenting with issues around their gender or sexuality. Mental health teams may not be equipped to support complex discussions with children and young people questioning their gender or sexuality, if they do not know a young person has SLCN.

### The “Why”: What mechanisms link mental health and language needs?

Some of the topics talked about by our stakeholders were considered to reflect “why” questions. Why do children with SLCN have an increased risk of mental health problems? What role does language play in mental health? Together, these questions frame a potential model that seeks to explain the links. To organise the links being mentioned and discussed, we summarise them here as: describing the problem, cognitive factors, environmental factors and biological factors.

### *Describing the problem better*

Some questions were from people who wanted to know more about the impact of SLCN on mental health and vice versa. They also wanted to know the prevalence of mental health problems in populations with SLCN, the prevalence of SLCN in mental health settings, and which aspects of language and mental health were related to each other. Some were focused on the differences and similarities of particular groups, especially children with neurodevelopmental conditions, and whether certain comorbidities or clusters of problems were most associated with mental health problems. These questions highlight that stakeholders still want to know more about the risks children with SLCN face in terms of their mental health, and vice versa, and want to understand more about what difficulties these children and young people are likely to face.

*“What is the prevalence of pragmatic difficulties in children and young people with mental health issues?”* – Survey respondent, Speech and language therapist

### *Cognitive factors*

*“How do language problems affect students’ emotional regulation?”* – Survey respondent, Classroom teacher

These questions and topics focused on cognitive factors that are associated with language problems or mental health problems and could help explain a link between them. This included socio-cognitive abilities, such as the skills that help children to make friends. They also included emotion cognition, such as recognising others’ emotions, and the ability to regulate emotions. Other questions considered the way children process information and think, for example their ability to imagine, or literal versus non-literal ways of thinking. Self-awareness and self-insight were also mentioned as potentially important factors for children to recognise their SLCN and mental health needs, and seek and access support. Some wanted to know more about how language problems might be associated to attentional problems, which may lead to issues in the classroom and socially.

*“It would be great if there could be research on building and developing relationships with friends. This is something we’re worried about that if our son can’t communicate well that people won’t want to be friends with him...”* – Workshop attendee, Parent of a child with SLCN and ADHD

### *Environmental factors*

These topics noted factors that were external to the child or young person that might drive an association between mental health and SLCN. Environmental factors can be broken down into different levels, operating at the level of the home and family, a child’s school environment, and their wider socio-geographical context. Specific environmental factors

*“People talk about “postcode lotteries” and difficulties accessing certain treatments and services, which could impact both families getting mental health treatments and speech and language therapy – could looking at problems accessing support in some places predict outcomes?”* – Workshop attendee, Medical student

described included experiences of trauma, parenting styles, home learning environments, schools with particular behaviour policies, and socio-economic factors affecting the local area. The perceptions of others were also mentioned by stakeholders – concerns that staff, professionals and peers might perceive their children negatively because of their language needs, and how these perceptions could impact on their children. Some of our workshop attendees noted that such factors do not operate in isolation and may interact with each other, and may even make other negative risk factors more likely (an “additive risk” approach).

### *Biological factors*

These topics considered overlapping biological factors that could explain links between mental health problems and SLCN. They included genetic risk factors, brain regions or brain systems. Importantly, academics in our workshops noted that genetic risks for language and mental health problems interact with environmental factors. This means that understanding biological links between mental health and language needs would still require a good understanding of environmental risk factors.

### The “What now”: clinical applications and applied research

Some topics considered by our stakeholders focused on changing current practice and applied research, with the view to improving detection, support and outcomes for children with SLCN and mental health problems.

It might appear to be the case that this research should follow on after we have a well worked understanding of the scientific model that links language and mental health (considered in our “why” theme). While developing such a model would almost certainly be useful for developing and improving applications, **there is no reason that these two research streams could not happen in parallel**. In fact, waiting to have a fully worked out scientific model of how language and mental health fit together is unlikely to be a good way forward: we already know that a sizeable minority of children with mental health problems have SLCN. **Waiting for basic research on this model, which would likely take decades, would lose the potential to improve clinical outcomes for children sooner.**

We summarise the main themes of clinical and applied research ideas (our “what now” ideas) here.

### *Organisational and workforce related research*

These topics centred on professionals and services. They included what the current knowledge of SLCN was amongst mental health practitioners, what the current knowledge of mental health was amongst speech and language therapists, and the development of training to improve this knowledge. It also included questions about how to support professionals from different backgrounds and disciplines to work together in multidisciplinary teams. It included service factors such as barriers to support and ease of access effects, including referral pathways between speech and language therapy and mental health

*“What does it look like when mental health services / speech and language services work together to approach assessment and intervention? What are the outcomes?” – Survey respondent, speech and language therapist*

services. This topic also included documenting resources and funding available to support children and young people with SLCN and mental health needs.

### *Treatments and interventions*

These topics focused on both preventative and reactionary interventions, adapting current treatments and interventions, and providing economic arguments to support interventions.

*“What are the essential language demands, vocabulary needed, comprehension level etc for young people to engage effectively in mental health therapies e. g. talking therapies?” – Survey respondent, Speech and language therapist*

**Preventative approaches** were mentioned frequently, in particular whether evidence could be sought to show that early intervention focusing on speech, language and communication development could improve children’s mental health outcomes in the long term. It was noted that “early” intervention should not be taken to assume before a child starts school; rather this should mean before future, more entrenched needs become established (for example, preparing for a child to move up to

secondary school could be considered to be an early intervention that helps prevent socioemotional problems in later adolescence). Indeed, adolescence was also seen as an important developmental period, in which young people might encounter increased social and academic demands, and is a known point in which mental health problems can manifest for the first time.

**Adapting current approaches** was also discussed, particularly how to make interventions and support more accessible to those with SLCN, or understanding what affects accessibility (such the complexity of therapist language, different settings, or different approaches). It was argued at our workshops that we currently do not know if common “talking therapies” for mental health are effective for children with SLCN. It was argued that this needs research, and it was suggested the researchers investigate the role of SLCN on perceived engagement of children and young people in their treatments, and drop out rates. Indeed, other workshop attendees suggested examining the role of SLCN with compliance with medical treatments: aside from psychological therapies, some mental health problems can be treated with pharmacological treatments (e.g. antidepressants). How do SLCNs affect taking some medication as it is intended?

*“How can I best support C/YP with language difficulties in the mental health work I deliver (how could their mental health be impacted?)?” – Survey respondent, IAPT worker*

*[Is it hard/okay or easy to understand the help people give you?] “I would say okay, because when people are trying to explain you things that you have to understand, there are some things that it’s like okay, I’m a bit confused. You haven’t really made it too clear. Basically [they should] use words where it’s like okay – okay, I understand what you’re trying to say. Because sometimes you got one of those people who use some random words that I’m like, ‘woah, I don’t even know what it means’.” – Young person with autism*

The potential for parents to support their children was also noted: clearly parents are keen to participate and facilitate their children’s mental health and emotional development.

It was argued that we need to understand not only the content and accessibility of interventions but also how much of an intervention is enough (“dose effects”), and the cost benefits of early interventions to preventing later problems that are more established and more costly to treat and support: this captures a health economics approach to SLCN and mental health.

### *Detection, diagnosis and assessment*

**“How do you know if someone with communication difficulties is having mental health problems if they do not know how to tell you they are having problems?” – Survey respondent, Family member of person with autism**

Some questions focused on the identification of individuals with SLCN and mental health needs. This included the whole span of different phases from initial detection (e.g. problems being spotted by adults in the child’s environment like teachers), diagnostic processes, and the tools used for assessment. Topics included the impact of language needs on mental health measures and psychological assessments, under-detection of need, misdiagnosis, the impact of comorbidities, the validity and reliability of measures, and also how to reassess and monitor progress. Some topics posed the question of investigating the utility of screening for communication needs in high-risk populations, such as young offenders.

Factors that impact on detection were suggested for future research, including the role of age (as different mental health problems, their interaction with SLCN may appear at different times). Disruptive behaviour was also mentioned: children with externalising behaviour may be more likely to receive support (although they may also be perceived more negatively by adults in their environments), and internalising problems may not receive support if they are not “causing a problem”. Our young person consultation also noted that for some young people difficulties might have been going on for such a long time, that they become “normal” to them, and they may have coping strategies that hide their mental health problems, and that stop them being able to express their feelings to others.

[How often do you feel sad or blue?] ***“It’s because there’s stuff I’ve been going through a lot – I’m used to it. Even now, I don’t really think about it or talk about it. There have been times in primary school and secondary school... times with my family, my friends... I would say it happens a lot, but I don’t really think about it too much. I stay in my own lane, and I listen to music a lot. I’d just say it happens sometimes - I just try not to think about it too much, because I know if I think about it too much, I’ll just start getting upset and probably end up crying and be punching everywhere.” – Young person with autism***



## Making predictions

One final theme cuts across the questions on the scientific model (our “why” questions) and applied clinical research (our “what now” questions). If we understand the relationship between language needs and mental health and the mechanisms that drive this association, and we have good clinical applied research, we should be able to predict who is most at risk, who needs support and what kind of support they will need. Importantly, mental health and SLCN outcomes may share common risk factors in early life: it was argued by some workshop attendees that there is already evidence that generally a common set of genetic/environmental risk factors operate for diverse adverse outcomes, rather than specific risk factors for specific outcomes. Understanding common risk factors also have the maximum utility in terms of preventive approaches.

**“How do we predict mental health difficulties in children with language difficulties?”** – Survey respondent, Speech and language therapist

This final theme is arguably the most ambitious and represents the ultimate ideal for understanding language and mental health needs, and how to respond effectively to them, taking individuals’ profiles and risk factors into account.

***“The public health advantage to understanding the shared risk factors between mental health and speech and language needs is that you could intervene in one specific risk factor and have a positive effect on multiple outcomes”*** – Workshop attendee, Academic

## CHALLENGES AND SOLUTIONS TO GETTING THE RESEARCH DONE

We asked our stakeholders in our survey and workshops about the challenges they foresaw for doing this research, and in our workshops we discussed ideas for potential solutions to overcome these problems. These issues represent both plausible reasons for why there has been little research on the topic of language, communication and mental health to date, and highlight challenges that future research programmes should plan to overcome.

### Working across disciplines, professions and services to champion the issue

The topic of language, communication and mental health is relevant to a wide range of professionals, including educational professionals (teachers, teaching assistants, special educational needs coordinators, educational psychologists), speech and language therapists, mental health professionals (psychologists, psychiatrists, counsellors, and more), and also occupational therapists, social workers, those working in the criminal justice system, and more. With regards to academic disciplines, it is relevant to psychology, health care, linguistics, speech and language therapy, education and social policy. Not all of these groups have training or expertise in language needs, or mental health. One challenge noted by our stakeholders was bringing together different disciplines and professionals, who may have different ways of working, different priorities, and different terminology, all of which may present barriers to effective joint working on the issue of language needs and mental health.



The “gap” between academic research and clinical/educational practice is a phenomenon that affects many different topics, but has been noted in the field of mental health (12). But if academic research is to change practice and improve the lives of children and young people with mental health and/or language needs, we must bridge this gap. Knowing how to work with clinicians, the structure of different clinical services, and what process prevent research being done in clinical practice, all create barriers between researchers and clinicians working together. Particularly for language and mental health needs, because the area is at the intersection between mental health services, education and speech and language needs, and as service provision and structure may be different in different local areas, knowing how to access the “right” professional to support research is a challenge for researchers.

Ideally, research would incorporate not just one clinician from one discipline, but incorporate a range of clinical and professional inputs. However, there are practical barriers that need to be overcome to support cross-disciplinary working; for example, the way medical records are shared may prevent cross-working across some professions and teams. This is relevant to the issue discussed below about reaching all people for whom research is relevant: information sharing and joint research with certain vulnerable groups, such as looked-after children or those in the criminal justice system, may be particularly challenging. Another practical barrier is the time needed for collaborative working: do clinicians have protected time to meet and work together, including the time needed to overcome philosophical, practical or terminology barriers, when it might seem easier to keep working with others from your own discipline?

Others argued that a lack of training on language needs could be a barrier to professionals working with speech and language therapists, or engaging in research on language and mental health. Stakeholders felt that, ideally, clinical psychologists, educational professionals and medical professionals ought to receive some training on SLCN (SLCN are not currently covered in, for example, the DClinPsy, the professional qualification needed to become a clinical psychologist in the UK, despite evidence that language needs are highly prevalent in children with emotional/behavioural disorders (6)). We note that it was a particular challenge for this project to bring in those who work in mental health (we discuss this more in our section on Reflections). Indeed, general awareness and understanding of SLCN and conditions like DLD was argued to be very low, which led to assumptions about “who” was affected by these issues: some stakeholders noted that in their experience it was often assumed that SLCN pertained to children and young people in a neurodevelopmental service pathway – but actually communication and language needs affect children and young people in all kinds of services. There were also concerns that in the presence of an SLCN, any mental health problems might be assumed to be a simple reflection of that SLCN (this is known as “diagnostic overshadowing”): this could mean that support for mental health problem is not appropriately offered.

*“I feel that communication needs are often only considered within mental health services when looking at neuro developmental assessments . The value of understanding communication profiles is not appreciated.” – Survey respondent, mental health nurse*

*“[We] need professionals to see mental health outside of SLCN – e.g. anxiety and autism, anxiety needs its own treatment.” – Survey respondent, parent of child with SLCN*

Related to this issue, some stakeholders expressed that they felt a challenge would be communicating the problem to those who might fund research, and competing in a research and clinical space where other issues are seen as “more important”. From a clinical perspective, if so much going on with children and young people with SLCN and SEMH, participating in research may not be seen as important, or seen as too difficult. From a funding perspective, making the case for the role of SLCN in mental health also has implications for accessing research funding and infrastructure: mental health research is a current priority (13,14), and research already demonstrates a high rate of SLCN amongst those with mental health needs. Indeed, research may for some time be invested in the impact of COVID-19 on children’s mental health and wellbeing outcomes, but it is likely that children’s language development will also have been impacted by the disruption caused by the pandemic, and that shared risk factors could link the pandemic to both language and mental health outcomes. How can we tap into this investment in mental health to boost research into the relationship with language and communication?

Potential solutions for this issue include:

- Creating spaces for collaborative working, sharing knowledge and expertise, in a manner that is not judgemental and not about pointing out gaps in others’ knowledge, but rather fosters positives relationships across disciplines. This could be joint conferences or shared events across professional bodies (e.g. across the British Psychological Society and the Royal College of Speech and Language Therapists, for example).
- Developing training on these topics to help bridge gaps in understanding. Available examples include training developed by the Royal College of Speech and Language Therapists on SEMH and SLCN(15). Another example is training available from the Royal College of General Practitioners on children’s language disorders(16). Some research groups have hosted small-scale events for medical students on topics such as DLD (17): looking to see how these could be offered more frequently could be a good way to spread awareness of SLCN outside of speech and language therapy.
- Encouraging academics to collaborate across disciplinary boundaries or with clinicians could be done via hosting special issues in relevant journals on this topic, or having funding for interdisciplinary work.

*“We don’t learn about any of these speech and language needs – so we don’t understand it, and then medical professionals are not going to label it as a language need. We don’t get taught about the role of SLT – it gets mentioned once in stroke management. What language needs are, and how common they are, could be taught to medics. It’s a long-term way of getting some clinicians involved, but raising awareness would help filter through some knowledge about these conditions and what SLTs do”. – Workshop attendee, Medical student*

- Dissemination of work is crucial to build links across researchers and practitioners. Researchers must disseminate research findings to ensure they reach the professionals they are relevant to. Open access/preprints could help, but researchers might also need to think about other outlets, such as videos and training materials.

### Reaching everyone who this research is relevant to

A challenge for all research is tackling bias in who takes part in research. For this topic, some participants and families affected by language or mental health problems are particularly vulnerable, and may be particularly hard to reach for research. Researchers need to consider carefully how they recruit their participants, the extent to which the research process is accessible to everyone who could take part, and how a lack of consideration of these factors could lead to bias in their research findings.

One barrier is the extent to which SLCN and SEMH problems may not be diagnosed, and these needs may not be recognised. If research relies on clinical services where children have been diagnosed, or at least referred, this research will only see children whose needs have been detected: we know that as many as 80% of children who have emotional/behavioural disorders have poor language skills that have not been recognised (4). Children may also mask the extent of their difficulties, preventing detection by professionals around them. How do we conduct research on children who need help but who have not been spotted?

Research into these topics will need to be mindful about the potential for the impact of stigma, or fear of judgement about children's needs. Indeed, parents of children with behavioural or language problems might have been told their child's problems are due to poor parenting. Children with some conditions may also mask their problems at school, but this may mean children exhibit problems at home, leading further to parents not being believed about their child's needs (masking is also relevant for researchers looking to use teacher report measures, which may underestimate the extent of a child's difficulties). In addition, there may be cultural differences in how mental health issues, emotions and language needs are discussed, and what expectations are about children's emotional and language development. It is worth noting that some families may have had bad experiences with professionals in the past: a researcher may be seen as "another professional", and families may be wary of them if they are concerned about how they or their child will be treated.

Some SLCN and mental health needs also have a genetic component to them, which means the problems can affect different family members: this could mean that some parents of children with SLCN may have undiagnosed language and communication needs themselves. This can make completing participant consent forms or completing questionnaires challenging for these families, and may mean they decide not to take part, or drop out.

*“When I have been associated with research projects, one of the things that happens all the time is that researchers will send out questionnaires for families to fill in. And if I am working with this family I’ll get a call from the parents, saying I got this in this the post, I don’t know what it is. Or they’ll say I’ve done this, can you take a look – and when you look, you realise they’ve totally misinterpreted the questions. So the information the researcher gets back might not be valid!”* – Workshop attendee, Speech and language therapist

Even if parents and guardians are willing to take part in research and complete the necessary forms, children and young people themselves also need to be supported to take part. This is covered further in our subsection below on measurement, but there may be problems with engaging with research for some young people due to their needs. Importantly, this could bias a researcher’s sample, leaving them with data only from those whose needs are not so severe. Indeed, one survey respondent was concerned that “Quite often it is the 'worried well' or more able young people that take part in research which gives a biased view of difficulty” (Survey respondent, clinical psychologist): this means that researchers need to effortfully engage families and young people who might be less interested in taking part in research initially.

A related issue is the extent to which online studies and surveys are accessible to everyone. Online data collection makes research convenient and scalable for researchers, and the pandemic has revolutionised the uptake of online tools which could help reach some people who might have struggled to visit a researcher at a lab or university. However, while online tools might help reach some people, they might disadvantage others. This includes those in digital poverty, or groups of children and young people who will find engaging a researcher online very hard.

Other hard to reach groups include young adults who are NEET (not in education, employment or training) and young offenders. It was also noted that some people may not be aware of their language needs: once out of the school system, recruiting young people for research on language needs will rely on individuals knowing about their own diagnoses/needs in order to know that the research is relevant to them. There are currently limited services for adults/young people over the age of 18 to be diagnosed with conditions like Developmental Language Disorder, so recruiting young adults for research would also be hard to do via clinical services.

Potential solutions for this issue include:

- Researchers must make sure their documents are accessible for everyone. Local research institutions may have specific requirements for certain documents: however, we would encourage researchers to challenge assumptions about what is accessible for everyone, discussing issues with their ethics committee representatives if necessary. If someone signs a consent form without really understanding it, then they have not given informed consent. Video explanations that accompany information sheets can help show families who the research team are, demonstrate what tasks will look like and provide a more accessible way to understand a project without relying heavily on literacy skills.

- Fostering trust with families is key. Working with communities, being receptive to feedback and being mindful of how researchers communicate with families is important. It is upsetting to be told that your child's language needs and/or mental health needs may be associated with a lack of social privilege for example. Individual researchers and research teams have a role to play in building trust, but we should also invest in platforms and services that help to do this: for example, supporting the DLD recruitment and engagement platform Engage with DLD.

### Measuring mental health and language problems distinctly and reliably

To understand the relationships between mental health and language needs, we need reliable measures of both constructs. However, we must be able to measure mental health and language as separate from each other, and know that measures are accessible and valid to be used with children and young people with SLCN.

Our stakeholders expressed concerns that mental health measures may be confounded by language needs. This is also a problem for clinical services as well as research: common tools to help gauge a young person's symptoms might be questionnaires that young people struggle to understand and complete. It was also noted that language needs may exacerbate mental health problems if people are not able to express their problems – this is an interesting potential mechanistic link between language and mental health, but also presents an interesting problem for researchers wanting to isolate these constructs. Stakeholders were concerned that assessments and interviews about mental health might (unknowingly) include leading questions, or items where children may not say what is true for their mental health, if they become confused, misunderstand the question, or become concerned with pleasing the assessor.

Similarly, mental health problems could impact on language and communication assessments. Children who are anxious or depressed or have behavioural or attentional problems could struggle to complete speech and language measures. This again leads back to the issue of bias, mentioned in the previous section – if it is the case that the children with the most severe mental health needs cannot complete the language and communication measures, then our estimates of the association between language and mental health variables will be under-estimates.

Related to the issue above of reaching everyone, some stakeholders suggested that some children and young people may not feel able to disclose their mental health needs/the extent of their mental health needs, or may not show them in a way that alerts clinicians, if children with SLCN have different symptom profiles to children without SLCN. Indeed, for some young people with SLCN, their emotional problems may have been very long-lasting: it may be hard for them to recognise that they have mental health problems if their difficulties have become "normal" to them. This will also make it difficult to detect when a young person's mental health is poor, if measures are based on looking for a change or deterioration in functioning. Of course this has implications for clinical practice, but these are all also problems for research, if our standard tools and practices are not sufficient to detect and measure mental health in these groups.

The age of research participants, and who completes the measures, also need consideration. If we want to conduct research that investigates whether early SLCN impacts on later mental health outcomes (or vice versa), we will need to collect measures from young children. But these topics will be hard to measure in young children via self-report. Parent and teacher report measures can certainly be helpful, but researchers must be cautious to assume they will give the same conclusions as if the children had been asked themselves (for example, a recent investigation into the ability to recognise one's own emotions found children and their parents' gave quite different answers (18)). This highlights the need to support children and young people to give their perspectives, something our stakeholders felt strongly about.

These measurement issues may affect different subgroups of children with SLCN differently. For example, what about those with very limited language? Or as another case, while metaphors and non-literal language might be okay when working with deaf children, these might be really challenging for children and young people with autism.

Finally, it was noted that mental health problems often fluctuate: of particular relevance to the topic of SLCN and mental health is how these fluctuations could take place across home and school. Research suggests that children with DLD camouflage their needs at school, but this leads to exhaustion and meltdowns at home (19).

**“Assessment of mental health so often relies on the reports and description of how someone is feeling/the thoughts they are experiencing and it is difficult for students with language problems to clearly explain their feelings and thoughts.” – Survey respondent, speech and language therapist**

Potential solutions for this issue include:

- We need more information about the extent of the issue of accessibility. Research into the impact of SLCN on common tools for measuring mental health symptoms, and vice versa, would be an excellent start. This could lead to the development of adapted tools, or a set of recommendations about which tools work best children with SLCN.
- If good quality language data became routinely collected, this could then be used in research along with administrative data on SEMH and education. We would need to research a consensus about what these measures are (ideally led by research, as suggested in the point above). Indeed, the Wellcome Trust has suggested standardising what mental health measures are used in research(20); could we do this for language and communication measures as well?
- More research is also needed that helps us to disentangle the variables of language and mental health. This could include questionnaires, but also experimental tasks that include steps that control for the effect of language ability on mental health and emotion processing.
- Our stakeholders suggested that we really also need a good picture of what “good” mental health is in SLCN, and how frequent different symptoms of mental health problems are in SLCN groups. The “Know Your Normal” campaign lead by the charity Ambitious about Autism, while not a research programme, could be seen as an example of recognising how neurodivergence may affect the presentation of mental

health needs. This requires data from clinical groups but also good normative data from suitable control populations.

- Semi-structured interviews or formats such as “talking mats” (a structured tool that helps supplement discussion with pictures and icons) might be more flexible and better able to support children with language needs. However, these will demand more time, meaning there is a high cost to researchers as they are more resource intensive.

### Gathering strong causal evidence

To really evidence that SLCN contribute to mental health problems (or vice versa), we need longitudinal evidence, and to know whether any relationships between language and mental health are due to direct effects of these constructs on each other, or by other variables.

We also need to control for many shared risk factors and confounding variables (variables which might mean it looks like language needs affect mental health needs, when in reality the explanation lies in a third variable). Confounding variables mentioned by our stakeholder include social disadvantage: socially or economically disadvantaged children may be at greater risk of both SLCN and mental health needs – but is *all* of the relationship between language and mental health explained by this? Comorbidity was also seen as a complicating factor – comorbidity is common in children with SLCN and SEMH. Another factor for researchers to consider is that families with detected SLCN or SEMH, and the professionals working around these children, are unlikely to do nothing to try to help their children: these groups will have received various interventions at different time points. But these interventions might have consequences for researchers’ variables of interest. An example might be emotion recognition training in children with autism: a researcher might want to investigate whether children with autism can recognise emotional faces as well as children without autism, but if a number of children in the autism group may have had support from a clinician or educational professional to help them learn emotional faces, or develop strategies to help them deduce emotion from faces, then the researcher’s study might not find a difference between the autism and non-autism participant groups, even if in truth many children with autism do find emotional faces hard to process.

Children and young people with SLCN and SEMH are heterogenous, and vary along many different factors. In an ideal world, a researcher would have access to information about all relevant factors that could confound a project. The challenge to research however is that measuring every possible confounding variable will mean that testing batteries and assessment time becomes very long. This will be burdensome for families, and means some may drop out of the research, leading to bias.

“Co-morbidity means getting a control group is tricky, as does the fact that they may be receiving multiple ‘interventions’ .” – Survey respondent, speech and language therapist

Any problems recruiting or drop out could be a problem for achieving designs with suitable statistical power. To really understand individual differences and different interactions

between variables, we require very large samples. In particular, research looking to investigate genetic risk (and how such risk interacts with environmental factors) requires very large sample sizes. Furthermore, it was noted that broad SLCN and mental health probably include sub-groups of children, and we would need evidence that could get beyond broad links between SLCN and mental health and tell us more about specific subgroups; again, to answer such questions meaningfully, we need big samples.

In addition to getting data from lots of families, and collecting lots of variables to really understand the relationships between SLCN and SEMH, good causal evidence would also come from longitudinal research, revisiting the same group of children and young people over many years. Such research is expensive, requiring long term investment, and takes a long time, meaning the conclusions of the research and their potential impact on practice would take a long time.

Potential solutions for this issue include:

- To achieve datasets of this kind, we need increased collaboration and initiatives that support the collection of the same variables across large groups of participants, to build up longitudinal evidence over time. For example, if many speech and language therapists were encouraged to use the same mental health assessment tool at the start and end of an intervention, over a few years this would grow to be a large sized dataset that could provide suitably well powered evidence about the role of speech and language therapy in mental health.
- Platforms and initiatives that support recruitment of children with SLCN and/or SEMH will help researchers reach recruitment targets for suitably powered research. One example is Engage with DLD, a researcher led initiative to help researchers interested in DLD reach families affected by the condition.

## REFLECTIONS AND RECOMMENDATIONS

Here we draw together key reflections and messages from our project.

### ***A complex set of questions – but the need for clinical application is urgent***

Our stakeholder consultation exercises have generated several themes for future research to focus on. These span the basic, scientific questions of what the relationships are between language, communication and mental health, but also include pressing clinical and applied questions about what could be done to improve outcomes now. We need ambitious research programmes on this topic, and the field is currently open at all levels, cognitive, environmental and biological. However, many stakeholder questions pertained to what could be done to help and improve the detection, care and outcomes for children with SLCN. It is thus paramount that basic research has clear routes to clinical applications, and that we do not delay in conducting research that has the potential to revolutionise practice soon.

We need research that examines practical efforts to make mental health care accessible to all, and that takes into account children and young people's language needs. Screening children and young people entering a service might appear to be the simplest step, and research could examine the utility of using SLCN screening in contexts like CAMHS. However,



we would caution that simply selecting a self or parent report screening questionnaire for language and communication issues is likely to miss many children and young people: such measures generally only measure specific aspects of communication and language. Because SLCN are varied (e.g. some children may have pragmatic difficulties, others may have issues with their comprehension), and some may have developed coping and camouflaging mechanisms, some children's problems may not be detectable in the absence of a speech and language therapy assessment. Using any measures to screen effectively will also require professionals to have good working knowledge of SLCN, to know when to refer to speech and language services. Some stakeholders noted that attempts to deploy simple screening measures in settings like Youth Justice by staff without sufficient training had not led to increases in referrals to speech and language services, despite consistent evidence that this is a population with high rates of SLCN. Furthermore, simply screening for difficulties will not be enough to support mental health professionals to adapt their practices.

### ***Hearing from Young People themselves***


It is critical that we hear from young people with SLCN and mental health needs themselves. While attempted, this was not a strength of this project unfortunately, and we received consultation from only 2 young people. The pandemic made it difficult for the team leading this project to gain direct face to face access to young people, and consultation of children and young people with SLCN requires expertise: otherwise, there is the risk that the consultation exercise is itself inaccessible, and not valid. We include the young people's ranked research priorities in this report and hope to share further data in the future (see Table 1 below).

The views and experiences of young people with SLCN about their mental health needs to be a target for future research and stakeholder exercises. There are in existence some reports on the experiences of autistic people, including children and young people, about their mental health care. However, this is absent for other groups, such as children and young people with DLD.

Future researchers could make more use of social media platforms to reach youth with SLCN. Some populations – for example autistic young people – have active and thriving online communities, which both offer them support and a community, but also could be a key opportunity for researchers to reach youth who might otherwise not take part in research. Investment in developing online communities for other SLCN, like DLD, could be both supportive for families and individuals, and useful for researchers.

Some opportunities may be found in tapping into existing structures and roles in the school system. In the UK, some schools have “resource bases”, essentially specialist support attached to a mainstream school, for children with SLCN. These resource bases could offer key opportunities to reach children and young people, but require suitable partnership for schools to be willing to take time to support researchers. Specialist Educational Needs Coordinators (SENCOs) are also a key professional group who could help identify children with SLCN and/or mental health concerns.

**Table 1: The ranked preferences for future research of 2 young people with SLCN**

	Young Person 1 (Autistic adolescent)	Young Person 2 (Child with DLD)
Top ranked research questions	<ul style="list-style-type: none"> <li>I would like people who work with me on my mental health to understand how to talk and listen to me</li> <li>I would like people to know how problems talking and understanding might affect my behaviour</li> </ul>	<ul style="list-style-type: none"> <li>I would like there to be better support for me in the classroom</li> <li>I would like there to be support for me to make friends and have better relationships</li> </ul>
	<ul style="list-style-type: none"> <li>I would like there to be support for me to make friends and have better relationships</li> <li>I would like there to be support for me to have better confidence and self-esteem</li> </ul>	<ul style="list-style-type: none"> <li>I would like to have better support to help me stay calm</li> <li>I would like people to know how problems talking and understanding might affect my behaviour</li> </ul>
	<ul style="list-style-type: none"> <li>I would like there to be more places I can go for support with my mental health</li> <li>I would like there to be more support for me not to be bullied</li> </ul>	<ul style="list-style-type: none"> <li>I would like there to be support for me to have better confidence and self-esteem</li> <li>I would like there to be more places I can go for support with my mental health</li> </ul>
Bottom ranked research questions	<ul style="list-style-type: none"> <li>I would like to have better support to help me stay calm</li> <li>I would like there to be better support for me in the classroom</li> </ul>	<ul style="list-style-type: none"> <li>I would like there to be more support for me not to be bullied</li> <li>I would like people who work with me on my mental health to understand how to talk and listen to me</li> </ul>

*Young people were asked to rank two sets of 4 research questions. This table summarises the rankings from two young people.*

### **Ensuring research is representative and reaches those who need it most**

It was clear our stakeholders were concerned that biases in research practices could mean that research that was conducted would not reflect the needs of all children and young people, or real clinical/educational practices.

Some of these concerns were related to “hard to reach” groups. Our stakeholders identified several groups who were perhaps more vulnerable, more complex or had more challenging needs, and argued that these groups need research (e.g young offenders, looked after children).

It was also noted that there are a large group of children whose needs may not be identified: if a research project was aiming to examine how children with DLD regulate their emotions for example, recruiting children with DLD likely requires the support of professionals who can help find children with a diagnosis or suspected diagnosis – but many children with language needs may never get referred to a speech and language therapist. Alternatively, families who are concerned about their children’s language may approach a speech and language therapist privately: but this is only an option for families with the resources to pay for this. This would mean that such research would not include children with language needs but who have not

been referred for assessment, or families who do not have the financial resources to pay for private assessments. Similarly, there were concerns that children who have mental health needs but whose problems do not manifest in behavioural difficulties may miss out on recognition and support.

### ***Engaging with other professions and getting SLCN onto the mental health agenda***

A barrier that was discussed a lot was the issue of alerting mental health professionals and organisations that support mental health research about the relevance of SLCN to their work. We experienced this barrier ourselves while conducting this project: when reaching out to clinical psychologists and psychiatrists, it was generally assumed that our topic pertained to neurodevelopmental disorders pathways, that is, children and young people being considered for an autism or ADHD diagnosis. It was hard to get across the message that language and communication issues pervade all CAMHS areas, not just those where a neurodevelopmental condition is suspected.

We need to combat the idea that SLCN is a “niche” topic, that only affects a small proportion of children with mental health needs. We could make a stronger case that, even where children do not have such poor language skills that they would meet the criteria for an SLCN, children with better language and communication skills may fare better in treatment than others. We need research to investigate these questions – but doing this research requires a level of buy-in from mental health services and funders.

Bringing professionals together would be a positive way to bridge the divide between mental health and speech and language disciplines. Doing this will require careful consideration of the format and conditions of such joint meetings, particularly as it will require busy clinicians to be released from some hours of work to engage in such an exercise. While we anticipate that greater joint working would be beneficial to clinical outcomes, this approach needs an evidence base to convince commissioners and those in charge of services to model their practices this way.

Projects that develop training could help to raise awareness about SLCN in mental health contexts, and promote more joint working across professions. Ideally, such research would work with professionals to identify key learning needs, develop training that supports shared knowledge across disciplines – perhaps ideally using such training as an opportunity to bring speech and language therapists and mental health professionals together, particularly ones who work in the same locality - and then examine the impact of such training on clinical practice and outcomes (e.g. does training for mental health professionals on SLCN lead to more referrals to speech and language therapists, and better psychological outcomes for their caseloads?).

There is an economic case to be made in recognising SLCN in mental health practice. The children’s communication charity I CAN produced a report on the costs of language problems, considering the costs to individuals and families but also to the nation and economy(21). In the report, it is argued that SLCN pose large costs to the nation due to an increasing shift towards work that relies heavily on communication skills, and also cites evidence that the

individuals whose SLCN are not recognised and supported are costly in terms of stays in young offender institutions. An up-to-date economic exercise that specifically considers the costs to mental health services of undetected and unsupported SLCN could help make the case for research and innovation in this area.

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