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Secondary effects of DLD: What, why and how to help

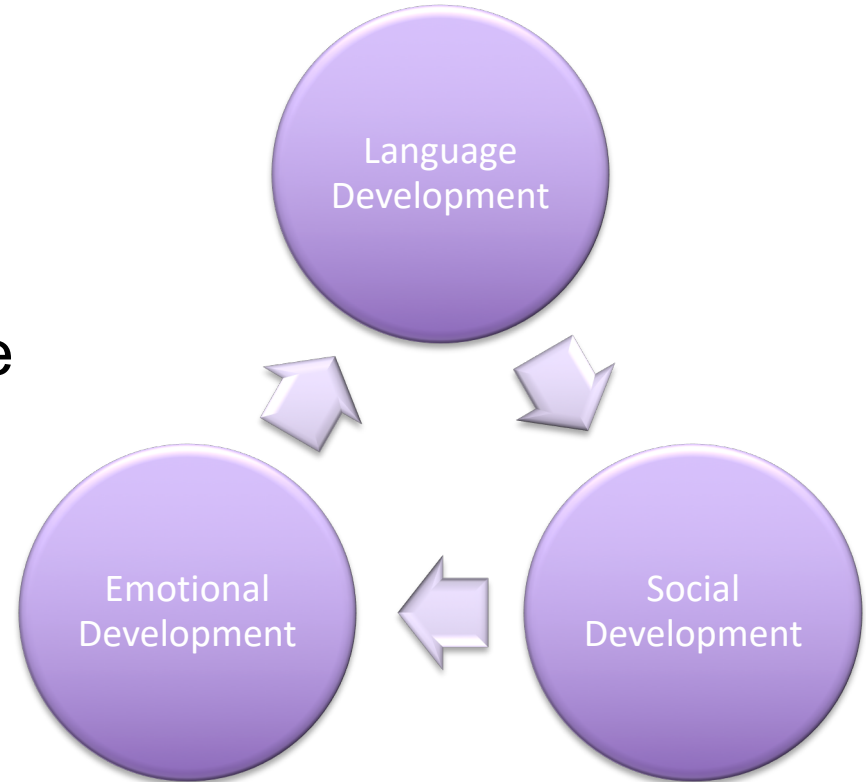
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Secondary effects

Definition: consequences of a language disorder directly or indirectly linked to the language problem

- Social Difficulties
- Emotional Difficulties
- Behavioural Difficulties



Research @Bath

Going beyond language - DLD has wider impacts on children's development than just language difficulties

Instead, we're seeking to understand *why* and *how* these secondary effects come about

Emotional Difficulties

St Clair et al., 2019 – Millennium Cohort Study

Early risk factors for emotional difficulties – are they elevated in children at risk of DLD?

Risk of DLD measured at age 5

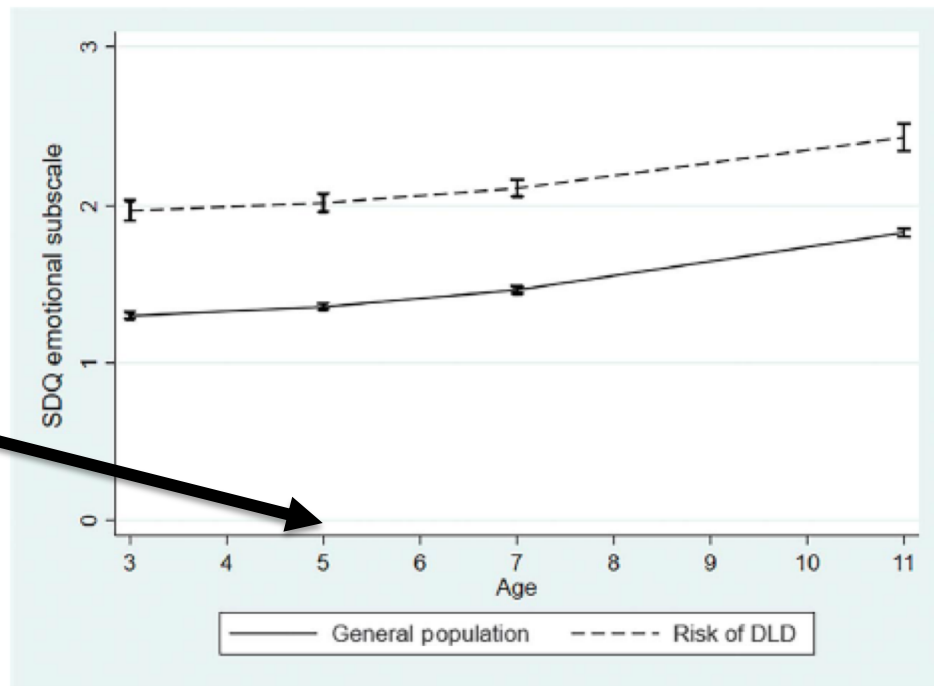
Emotional difficulties – age 3 to age 11

Emotional Difficulties

Elevated emotional difficulties across development

Risk of DLD at age 5

DLD does not “emerge” at age 5 – early years are important!



Emotional Difficulties

Key risk factors for emotional difficulties evaluated:

Temperamental difficulties (9 months)

Peer problems (3 years)

Emotional regulation/independence (3 years)

Emotional dysregulation (3 years)

Emotional Difficulties

9 months: increased irregular patterns of eating/sleeping, adaptability problems, and approach/withdrawal problems

3 years: increased peer problems, more emotional regulation/independence problems, more problems in emotional dysregulation



Emotional Difficulties

These elevated early risk factors:

- *Fully* explain elevations in age 3 emotional symptoms
- *Partially* explain elevations in age 11 emotional symptoms

Take home message: Helping with social and emotional development may reduce risk of emotional difficulties

Social Difficulties

Wide variety of research indicates children with DLD have more peer interaction problems

Peer interaction difficulties seem to increase into adolescence (St Clair et al., 2011)



Social Differences

Conti-Ramsden and Durkin (2015) point to strength in prosocial tendencies

Prosociality – positive responsive to other people's needs

- Helpful to others
- Kindness
- Readily sharing with others



Social Difficulties

Some research shows small, but significant decreased prosocial tendencies

- Lack of social knowledge or lack of knowledge about how to help?

Overall, prosocial behaviour a relative strength in children with DLD

Social Difficulties

Toseeb & St Clair (under review)

- Prosociality in childhood and adolescence
- High prosocial tendencies in adolescence
 - Protective against emotional, peer, conduct and hyperactivity problems

Take home message: Encouraging prosocial behaviour may be protective against social, emotional and behavioural problems

Social Difficulties

Lloyd-Esenkaya et al. (under review)

Focus groups with parents and specialist teachers

Evaluating reasons behind peer interaction difficulties in children with DLD

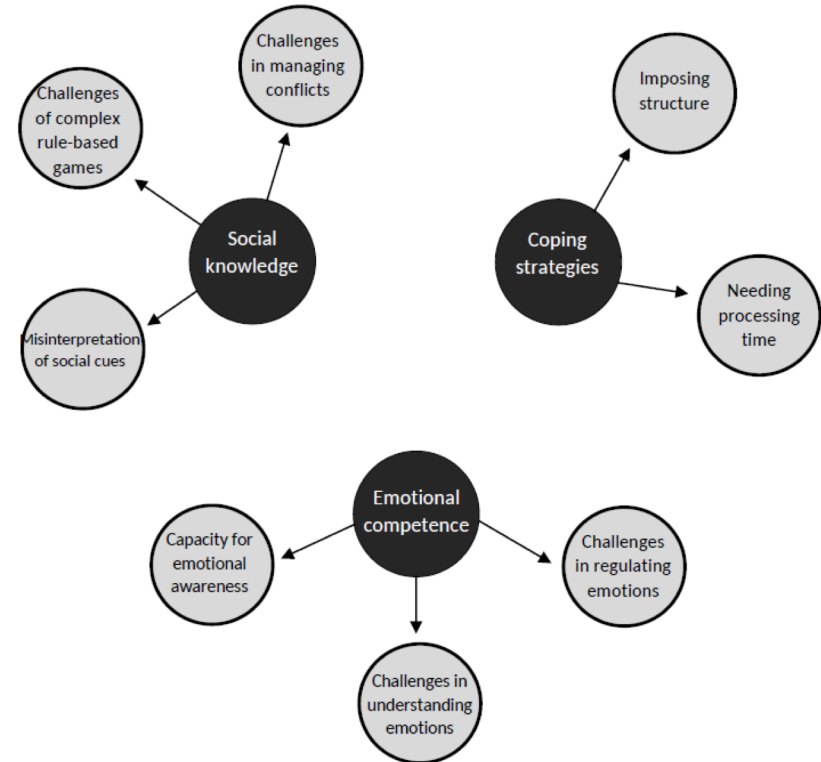


Social Difficulties

Challenges in managing social situations

Difficulties with emotional competence

Unique coping strategies





Social Difficulties

Take home message: Children may need time away from language demands after a long day of concentrating and processing language

[Aileen Burnett – DLD and Us: Friends and Family](#)

Take home message: Work on emotional awareness in self and others and on controlling emotional reactions

Social Difficulties

Take home message: help your child understand what went wrong in different social conflicts

- Explicitly discuss social situations
- Social skills training, similar to Autism, might help

Emotional Difficulties

Children and adolescents with DLD have increased emotional problems when compared to peers without language difficulties

Reduces in adolescence, but still increased levels in adolescence (St Clair et al., 2011)

Emotional Difficulties

Increased rates of psychiatric difficulties in childhood and late adolescence (Beitchman, 1996, 2001)

No increased risk for psychiatric problems at age 31 (Beitchman et al., 2014)

Emotional Difficulties

Botting et al., 2016

Self-efficacy = belief in the ability to achieve one's goals independently

Strongest predictor of depression and anxiety in adults with and without DLD



Emotional Difficulties

Direct relationship between language ability and depression/anxiety

Self efficacy entirely explained the link between language and depression/anxiety

Take home message: Encouraging a sense of self-efficacy/independence in children with DLD may create resilience to emotional difficulties

Emotional Difficulties

Forrest et al., 2018 – Millennium Cohort Study

Does peer problems explain some of the increased emotional difficulties?

Peer problems, and social support, are related to depression (St Clair et al., 2019; van Harmelen et al, 2016)

Emotional Difficulties

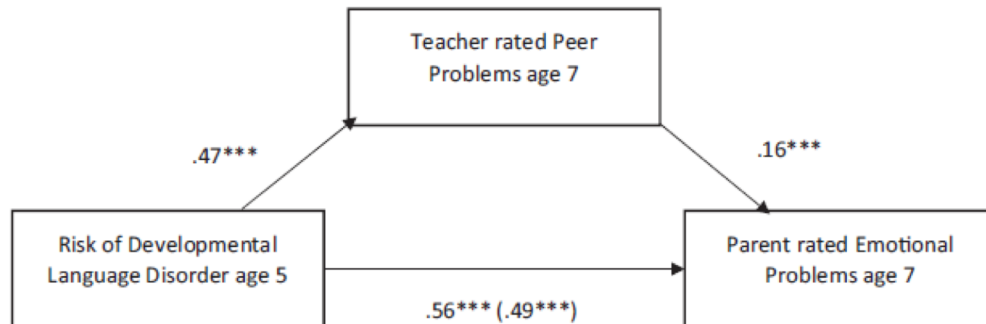


Figure 2. Regression coefficients for the relationship between risk of developmental language disorder (rDLD) at age 5 and emotional problems at age 7 as mediated by peer problems at age 7. The regression coefficient for the effect of rDLD grouping on emotional problems after controlling for peer problems is shown in parentheses.

14% of the variance in emotional problems at age 7 accounted for by peer problems at age 7

Emotional Difficulties

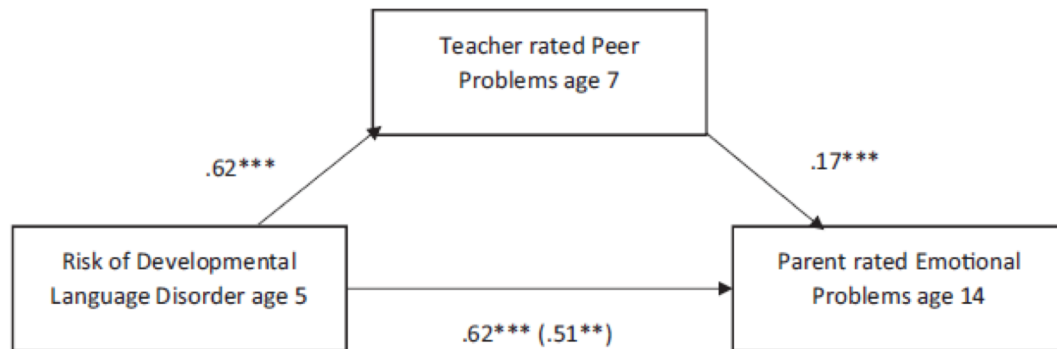


Figure 3. Regression coefficients for the relationship between risk of developmental language disorder (rDLD) at age 5 and emotional problems at age 14 as mediated by peer problems at age 7. The regression coefficient for the effect of rDLD grouping on emotional problems after controlling for peer problems is shown in parentheses.

17% of the variance in emotional problems at age 14 accounted for by peer problems at age 7

Emotional Difficulties

Take home message: Helping with social difficulties may help provide resilience against emotional problems

This result was replicated within Claire's sample of adolescents with DLD



Tips on Emotional Development!

No research (to our knowledge) has looked at interventions to improve emotional development in children with DLD

Emotional development = emotional expression, emotional understanding, and emotional regulation

These skills vitally important for social development



Tips for Emotional Development!

Have emotional conversations

- Might occur later in development in children with DLD
- Still important to help children understand their own emotions as well as other's emotional reactions
- Try to label other's emotions – talk with your child about what another might be feeling
- Higher numbers of emotional conversations = better understanding of peer emotions later in development



Tips for Emotional Development!

Try to model positive emotions

- Good emotional regulation (ability to monitor, control and modify emotional experiences) in parents relates to better emotional regulation in children
- Try to avoid outburst of anger or other negative emotions
 - This tells children it's ok to act out their anger, which could lead to aggression to other children



Tips for Emotional Development!

Provide emotional support in an accepting and warm manner

- Accept your child's emotions – no dismissing their emotional experience!
- Dismissive and hostile parenting particularly unhelpful

Tips for Social Development!

No research (to our knowledge) has looked at interventions to improve social skills in children with DLD

We do know what helps from research looking at improving children's social skills in general

Tips for Social Development!

Talk and provide advice on how to handle social situations

- Positive and rule-orientated approaches useful
- Avoid vague and avoidant strategies

Tips for Social Development!

Provide socialisation opportunities

- Sports teams, social clubs, play dates, dance/gymnastics, etc.
- More opportunities to socialise = better social skills
- However, this might be more difficult to navigate with children with DLD

[Aileen Burnett – DLD and Us: Leisure](#)

Tips for Social Development!

Understand that some children vary widely in how naturally social they are

- Shyness and sociability key temperamental traits
- Negative emotionality another key temperamental trait related to social skills
- Good emotional regulation skills often equip even temperamentally “at risk” kids to do well socially

One last thought...

Empathy and story reading:

<https://www.bbc.co.uk/sounds/play/m00070jp>

Woman's Hour – July 25th, 2019

So does reading to children predict children's behaviour, above and beyond SES?

One last thought...

Frequency of reading at age 5:

General population

- Relates to age 11 conduct, hyperactivity and peer problems, prosocial behaviour

Risk of DLD

- **Relates to age 11 conduct and peer problems**

Take home message: Reading with your children/encouraging reading may help build prosocial skills?

The final (positive) message!

Children with known DLD are not at increased risk for contact with juvenile offending services

- Winstanley et al., 2018 (replicated in MCS, unpublished)

Adults with DLD were equally likely to be in work and had equivalent earnings to a matched group without DLD

- Conti-Ramsden et al., 2018



Thanks for listening!

Any questions?



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