Language, learning, and anxiety – understanding the links

Dr Robin Harvey OAM, MAPS
Developmental and Educational Psychologist
Milestones Clinic

©Robin Harvey 2010
Key developmental tasks for a young child

- Developing effective communication skills
- Developing effective learning behaviours and academic skills
- Developing the ability to regulate emotions and interact with others

©Robin Harvey 2010
Areas of Focus

- A consideration of the key skills of language/communication.
- Overview of the different types of language difficulties that may be observed.
- A brief review of research evidence linking language, learning and social/emotional difficulties.
- Outcomes of these developmental difficulties.
- Implications for support and intervention.

©Robin Harvey 2010
Language doesn’t occur in a vacuum!

Language is the communication system that enables an individual to function in society. It is a system of spoken and written words, grammar, vocabulary and gestures. We use language to express ourselves, to understand and make sense of what is going on around us.”

(Discussion paper: Speech and Language Planning, W.A. Department of Education, 1999)
Considering language development

Origins of linguistic ability focus on the development of:

- phonology
- semantics
- grammar and syntax

Understanding this allows us to be impressed about the development of children’s structural knowledge of language but ......
Pragmatic skills

No child acquires language without conversing with someone and requires the ability to relate his/her utterances appropriately to the utterances of others.

(Lindsay and Dockerill, 2000)

Children who lack pragmatic skills tend to be isolated and rejected by their peers.

(Donahue and Prescott, 1988).

Social rules of communication are just as important to the use of language as the grammatical.

(Bishop, 1997)
Pragmatic language development

Children also need to learn to

- hold a conversation including understanding the perspective of others.
- use language in a variety of different social settings.
- use language to understand emotions
- use language to assist with self regulation.
- Use language within a learning context.

©Robin Harvey 2010
"Margaret told Gina that you told her what I told you not to tell her! So don't you dare tell her that I told you she told me what I told you not to tell her!"
Receptive language problems

Primarily difficulties with comprehending or understanding what is communicated to them. Associated with limited vocabulary and/or difficulties in understanding how concepts are expressed in words and word combinations.

Often undiagnosed even after school entry but children frequently identified with behavioural difficulties:

- Inattention
- Noncompliance
- Aggression
Expressive language difficulties

Involve problems in expressing or using language to communicate with others in ways that can be easily understood.

Have problems with:

- Remembering individual words
- The rules of grammar
- How to connect words
- Using language to meet their needs – asking questions, describing events, asking and explaining.

©Robin Harvey 2010
Pragmatic difficulties

- Difficulties in social interaction and connected communication.
- Most frequently observed with a lack of understanding of the rules of language in social settings (e.g. turntaking, eye contact, gesture, tone of voice).
- Difficulties with open ended communication.
- Difficulties in inferencing and use of context.
- Difficulties in providing coherent information.

©Robin Harvey 2010
Why do language difficulties lead to social and learning problems for the child?

Language assists with:

- turn taking skills and play entry
- effective communication with peers and adults
- understanding the emotions of others and self
- expressing own needs, wants and emotions in acceptable ways
- giving and receiving emotional solace.
- understanding increasingly complex social requirements

©Robin Harvey 2010
Development of language assists with (cont’d):

- compliance with requests and instructions
- developing self regulatory skills
- monitoring the responses of others
- problem solving
- learning skills and generalising these to novel situations
- reasoning in the abstract
- remembering information
MY RABBIT DIED LAST NIGHT, I HAD HIM FOR THREE YEARS.

MY RABBIT'S NOT DEAD. HE'S GOT FLUFFY EARS AND I'M GOING TO PLAY WITH HIM TONIGHT.

YOU'RE NOT MY FRIEND.

WHAT DID I SAY?
The evidence: Language impairment (LI) and social and emotional development.
“I’m just like a broken toy. I just get passed from one person to another. Nobody wants to play with me.”

(11.3 yr old boy diagnosed with specific language impairment at age 4 years. He has received language support and is performing well academically)
Long term impact

- 10 yr follow up of social and behavioural competency of children diagnosed with LI – rated by parents as displaying poor social skills, high levels of anxiety and behavioural problems.
  (Aram, Ekelman & Nation, 1984;)

Children diagnosed with a language impairment had significantly higher rates of social anxiety in young adulthood (14 year follow up) when compared with non impaired children.
  (Beitchman et al., 2001)

©Robin Harvey 2010
Long term impact (cont’d)

Adults with presenting for treatment with expressive language problems showed a two fold increase in diagnosis of a mood disorder (primarily anxiety).

(Iverach, O’Brien, Jones & Block, 2010)

University students with an identified language and/or learning difficulties showed higher levels of state anxiety and elevated levels of academic and social anxiety when compared to peers.

(Carrol & Iles, 2006)

©Robin Harvey 2010
It also starts young

Relationship between language comprehension, language decoding and compliance in 30 children aged 12 – 18 months.

Findings

- high compliance to adult requests they understood (73 – 77%)
- Low compliance for noncomprehended requests (14 – 22%)

Conclusions

- compliance directly associated with whether or not the child understood the request.
- Emergent negativism may in part be a function of their inability to decipher caregiver requests.

©Robin Harvey 2010 (Kalor and Kopp, 1990)
More research findings

- Children with LI are typically nominated by peers as ‘disliked’ while children with more advanced language skills dominate the ‘liked’ nominations.  
  
  (Gertner, Rice & Hadley, 1994)

- Children with LI are interrupted more frequently than non-language impaired children 
  
  (Wellen & Broen, 1982)

- Children with LI frequently ignore social advances of other children and are frequently ignored by others. 
  
  (Craig and Washington, 1993)
Children with LI were less likely to understand when and where emotions should be hidden/displayed when encountering various social situations.

(Fujuki, Spackman, Brinton & Ricks, 2007)

Tended to rate themselves as being less satisfied with their peer relationships and lonelier at school than other children on self report measures.

(Fujuki and colleagues 1996, 2004).
Social impact of language impairment

- Are more likely to experience social conflict more frequently than non-language impaired children
- Are left out of play
- Have few friends
- Tend to cluster around adults
- Are more at risk of conduct problems
- Have trouble regulating their emotions in social situations.
- Have limited nonverbal as well as verbal participation in groups.

(Gallagher, 1999; Vitaro et al, 2009; Wadman et al, 2010)
Common social issues: children with language problems or emotional difficulties

- Language output not adapted to listener needs.
- Difficulties in introducing, maintaining and changing topics.
- Fewer socially positive utterances produced within interactions.
- Insufficient verbalisation during tasks that require planning and organisation.

(Tannock & Schachar, 1996)
In summary: Social emotional issues associated with language impairment

- poor self esteem
- high levels of anxiety in social situations
- Self, parent and teacher report – child is sad, lonely and/or depressed
- higher risk of being bullied
- Poor problem solving strategies
- High risk of delinquency in adolescence

©Robin Harvey 2010
Age related impact

At younger ages
- General reports of immaturity from teachers and parents
- Inattention
- Hyperactivity
- Impulsivity
- Frustration
- Aggression
- Conduct disorder

Older children
- Low self esteem
- Anxiety
- Delinquency

e.g. Baker and Cantwell, 1987; Beitchman & colleagues, 2004)
The evidence:

Language impairments and learning difficulties.
Issues of processing capacity

Information processing limitations have been identified in children with language impairments and these have a general impact on learning.

- Poor working memory (Bishop, 1997; Leonard et. al., 2007)
- Weak executive functioning and response inhibition
- Weaker visual and verbal processing on a range of tasks (Im-Bolter et. al., 2006)
Attention Deficits

Children diagnosed with ADHD have a higher incidence of language deficits.

(Willenger et. Al., 2003)

Children diagnosed with language impairments have a higher incidence of attentional problems.

(reviewed by Tannock & Schacher, 1996)

Reduced capacity for sustained attention in the absence of a diagnosis of ADHD.

(Finneran et. Al., 2009)

©Robin Harvey 2010
Literacy problems

- Specific oral language impairment during preschool years is highly associated with reading and writing disabilities during school years. (Berninger & Richards, 2010)

- Children with LI at age 4 whose language impairment had resolved by age 5½ exhibited normal literacy development, whereas those who still had verbal deficits at age 5½ tended to have both oral language and reading deficits at age 8½. (Bishop & Adams, 1990)

©Robin Harvey 2010
Diagnosis and Intervention
Diagnosis

Consider the issue of language limitations particularly when a child presents with emotional and behavioural problems.

- Take notice of assessment hints that suggest that all is not well (e.g. verbal comprehension on the WISC-IV)

- Take time to explore the child’s abilities to express him/herself in a range of situations.

- Take the time to investigate a child’s ability to comprehend in a range of situations.
Piaget and Vygotsky highlight the concepts of readiness and scaffolding.

LI can make a difference to when readiness occurs and when scaffolding will be helpful in developing skills in both cognitive and social/emotional development.
Responding to social/emotional and learning difficulties in the light of this knowledge

- Teach verbal rehearsal
- Teach the language of emotions and language of self management
- Encourage and practice social interactions through coaching/modelling.
- Provide verbal and non-verbal scaffolding for learning.
- Teach conversational turn taking.
- Cue children to listen
Engage in conversation not always direction.
Practice giving directions that are not ‘ideal’
Encourage children to notice what other children of the same age are saying or doing.
Practice the language of play – descriptive commentary
Recognise issues of language and associated working memory difficulties during therapy for anxiety and depression (e.g. when using CBT)
Practice, practice and practice!
Other strategies to think about

- Reduce attentional demands and recognise working memory issues.
- Use highlighters to identify key points.
- Assign specific roles in group activities to allow children with LI to join in with confidence.
- Recognise changing emotional states and deal with them early.
- Don’t expect a child with LI to explain under conditions of pressure e.g. conflict situation.
Be careful when interpreting non-compliance as disobedience.

Develop ‘safety’ strategies for the anxious child.

Provide them with time and space once a problem occurs before engaging in discussion.

Encourage child to think of alternative solutions and not catastrophise.
Using self-talk to reduce anxiety

Many children with early language deficits have not have developed ‘inner speech’ which is a key self-regulatory mechanism. You need to teach it!

- Encourage them to talk aloud to themselves (quietly) in order to assist with planning and reduce impulsiveness.
- Teach them the key question “Is what I am doing helping me?”

©Robin Harvey 2010
Expanding language use – pragmatic intervention.

Need to teach and practice explicitly:

- Negotiation - what words do we use and what do they mean; listening to others, presenting alternatives, putting own point of view and reasons why; understanding the other point of view

- Following instructions – using a sequential approach, providing information, what is important and what is not, filtering

©Robin Harvey 2010
Pragmatic intervention (cont’d)

- Describing – identifying key information – features and function; checking what the other person knows
- Deciding what is appropriate in various social situations
- Turn-taking – not interrupting, maintaining a conversational topic; listener cues, offering new information, asking questions

©Robin Harvey 2010
Questions and comments?