The role of mindset and self-esteem in motivation, exploration and helping in the school context

In the annual LEARN! Conference 2020, three researchers gave valuable insights into their recent findings on the role of mindset, self-esteem, and exploration in the school context.

Sibel Altikulac: Mindset profiles of secondary school pupils: more complex than a growth mindset or a fixed mindset

Having a fixed mindset or a growth mindset is assumed to play a large role in the academic achievement of students. VU Amsterdam PhD student Sibel Altikulac challenged the simplified model of a fixed mindset or a growth mindset in her research and took a more complex approach to the matter. In her talk, she elaborated on the lack of consistent prior research that confirms the validity of the simplified model. Instead, mixed findings point towards a more complex interplay of concepts.

Applying an innovative data-driven approach, the speaker based her data on the constructs of mindset/theory of intelligence, achievement goals, effort beliefs and academic motivation, which in turn entail further subscales. Her findings revealed four different student profiles: performance-focused, performance-aversive, disengaged and growth-competitive. The speaker emphasised that no typical growth mindset profile was derived based on her data, suggesting that we need to look beyond black and white thinking to understand the complex nature of mindsets. She argued that her research not only adds to the literature on mindset profiles, but also offers opportunities to identify high-risk subgroups in the student population and, in turn, help these students to fulfil their academic potential. In the future, she plans to conduct research that builds on her current findings, such as investigating how students in the four profiles differ in their academic achievement and well-being.

Dr. Jellie Sierksma: Do children help other children differently based on their perceived level of competence?

Children start helping other children early in life, which is expressed in simple gestures such as sharing things. This peer behaviour is frequently implemented in educational systems encouraging children to help other children in learning. Dr. Jellie Sierksma investigated whether children differ in the type of help they provide to peers depending on their perceived level of competence. The research aimed to clarify inconsistencies in previous research on the outcomes of peer interactions in education.

In collaboration with the NEMO - Science Museum Amsterdam, Dr. Jellie Sierksma and colleagues investigated whether children are able to differentiate between empowering help and non-empowering help at a young age. They found children as young as 7 years of age would label children receiving empowering help as smarter than children receiving non-empowering help.

Building on the first study, the speaker explored whether the perception of competence influenced the type of help children provided to their peers. It was found that, as expected, children adjusted the help they provided to the recipient’s level of competence. Dr. Jellie
Sierksma pointed out that her findings are an indicator for the selective helping behaviour of children. This selective helping behaviour might in turn reinforce existing educational inequalities in the classroom.

Dr. Katinka van der Kooij: Parental praise can stimulate motor exploration in children with low self-esteem

One of the most powerful tools a caregiver can use to motivate a child is parental praise. In her research, Dr. Katinka van der Kooij explored how different variations of parental praise can influence motor exploration in children. Previous research showed that the self-esteem of a child is an indicator of how different forms of parental praise facilitate a child’s behaviour.

In collaboration with the NEMO - Science Museum Amsterdam, children participated in a VR game in which they engaged in motor movements, while a parent offered feedback in the form of inflated praise, non-inflated praise, or no praise.

In line with their expectations, Dr. Katinka van der Kooij and colleagues found that non-inflated parental praise stimulated children with low-esteem to engage in motor exploration. Parent’s inflated praise, however, did not influence children’s exploration any differently than no praise at all. She pointed out that this contradicts previous findings which suggested that inflated praise reduced challenge-seeking behaviour in children with low self-esteem, so this piece of the puzzle still needs to be solved. She concluded with a positive message for all parents out there, namely that praising children does not seem to decrease their exploratory behaviour.