

Associations between teachers' instructional practices and student engagement in the 2nd and 7th grade classrooms

Katrin Poom-Valickis^{a1}, Anna-Liisa Jõgi^b,
Inge Timoštšuk^a, Annika Oja^a

^a School of Educational Sciences, Tallinn University

^b School of Natural Sciences and Health, Tallinn University

Summary

According to the self-determination theory, the social environment can support personal motivation by satisfying a person's need for autonomy, competence and relatedness, the need to feel as an informed agent of one's actions who is able to cope with any situation, and as someone who is connected to others (Ryan & Deci, 2000, 2002). In the classroom the teacher bears a significant role in creating a supportive social environment and, therefore, the teaching, organising and communicating behaviours of the teacher have an effect on the engagement of students (Jang et al., 2010; Reeve, 2009). Student engagement, being a multidimensional structure comprises of three inter-twined components: behavioural, cognitive and emotional engagement (Reeve & Lee, 2014). Students who are engaged in classroom activities are committed and ready to put an effort into succeeding, they are actively participating in lessons and show positive emotions (interest, enthusiasm and optimism). Earlier studies have demonstrated the positive effect of teachers' autonomy supportive behaviours (using interesting and relevant teaching methods, offering challenges of optimal difficulty, and explicating important learning aims) on student engagement (Jang et al., 2010). Structured lessons, on the other hand, help create learning environments where learners are met with clear expectations, as well as offered guidance and feedback supporting the learning process. In other words, the structure enhances the students' will to act, whereas autonomy support enables the willingness to act to be self-determined and co-ordinated by the student's own internal means (Reeve, 2002).

In this article we focus on the association between teachers' instructional practices and students' engagement in learning. More specifically, we

¹ School of Educational Sciences, Tallinn University, Uus-Sadama 5, 10120 Tallinn, Estonia; katrinpv@tlu.ee

aim to analyse the associations between student engagement and teachers' behaviour that support autonomy and structuring. Based on earlier studies we assumed that autonomy support and structure would both be predictors of student engagement (Jang et al., 2010). We were also interested in analysing the differences between students' subjective appraisals of their engagement in classroom activities in the first and the third stages of basic school i.e. in the 2nd and 7th grade, as well as between genders. Based on previous research we expected girls to report higher levels of engagement than boys (Rimm-Kaufman et al., 2015).

In order to test these hypotheses we carried out classroom observations and asked the students to fill in questionnaires. We used a total of 41 different classroom observations in grade 2 (19 different teachers) and 50 observations in grade 7 (41 different teachers). Every lesson was observed by two independent observers using observation forms. The observation forms included the assessment of autonomy support and structuring behaviours, both on three aspects and using bipolar statements (Jang et al., 2010). Each bipolar statement was assessed on a 7 point Likert scale. The engagement was assessed on the basis of self-report instruments by 260 second graders (134 boys) and 207 seventh graders (100 boys). The students gave their assessments to four questions concerning their engagement at the end of each observed lesson (Fredricks et al., 2004; Jang et al., 2010). Descriptive analyses were carried out with SPSS 18.0. The two-level regression model was estimated with MPlus 6.0 (Muthén & Muthén, 1998–2010).

On the basis of the observed lessons it can be concluded that 2nd and 7th grade teachers offer their students medium levels of autonomy and structure. At the same time second graders feel significantly more engaged than seventh graders in lesson activities, achieving significantly higher scores in all engagement dimensions. The engagement of second grade students can partly be positively influenced by class-teachers' higher mean level autonomy support and structuring behaviours compared to seventh grade teachers. At the same time the instructional practices of teachers varied notably, especially for autonomy support. When analysing the effect of the two components of instructional practices on students' engagement, it was shown that the support given by teachers to autonomy lead to students' mean level effort expenditure in the 2nd grade and students' mean level enjoyment of the in the 7th grade classes. Teacher's structuring activities had an effect only in the 7th grade with students in more structured lessons being more attentive and exerting more effort.

As with teachers' instructional practices, there was also significant variation in students' engagement within classes and, therefore, we can assume

that besides autonomy support, students' motivation and active engagement are also affected by students' individual characteristics that bear no direct associations with the classroom social environment. The positive correlation between the two components of instructional practices was expected as both are based on the learner-centred view of teaching, supporting student autonomy on the one hand and offering clear guidance and constructive feedback on the other (Sierens et al., 2009).

Assessing gender differences in students' assessments to their engagement confirmed our hypothesis. In the 2nd grade girls were more engaged compared to the boys: they reported higher levels of attentiveness, higher effort and also more enjoyment of the lessons. In the 7th grade the girls assessed themselves as more attentive and more engaged than boys. The results can be compared to similar international studies where girls tend to show higher levels of engagement than boys (Lietaert et al., 2014; Marks, 2000; Rimm-Kaufman et al., 2015). At the same time no gender differences can be found in school enjoyment in the 7th grade. This component of enjoyment is also the lowest in the 2nd as well as the 7th grade.

To sum up, it can be stated that although 2nd and 7th grade students are all in all attentive and engaged in the lessons, their enjoyment of lessons is below average. Based on that, we recommend that in order to create autonomy supportive classrooms that could enhance students' motivation and engagement, more attention should be paid to the analysis and development of the quality of teachers' instructional practices during teacher training and in-service courses.

Keywords: self-determination theory, teacher instructional practices, autonomy and structure, student engagement