

Academic burnout among Estonian and Russian middle school students

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Summary

Different documents and research that guides educational policy at the national level (Eesti elukestva õppe strateegia 2020, 2014) as well as in the European Union (Council Recommendation, 2018; OECD, 2017, 2018) stress the importance of guiding skills that help sustain students' psychological well-being. In order to meet the demands to support students' social-emotional needs, Estonia has introduced the concept of general competencies into its National Curriculum (Põhikooli riiklik õppekava, 2018). The theoretical frameworks of self-regulated learning also clearly state the importance of cognitive, metacognitive, behavioral, motivational and social-emotional aspects that are essential to support the development of students who are in control of their learning and well-being (e.g., Boekaerts & Niemivirta, 2000; Efklides, 2011; Pintrich, 2000; Zimmerman, 2000; for a review see also Panadero, 2017).

The importance of well-being is also supported by the fact that it serves as an important foundation for building academic skills (Buecker et al., 2018) and staying on the educational track (Bask & Salmela-Aro, 2013). It has been found that subjective well-being is an important predictor of students' personal development as well as their academic success (Yu et al., 2018). A lack of emotional well-being can manifest itself in feelings of academic burnout (Salmela-Aro, Savolainen et al., 2009) that has been associated with adolescents' poor achievement (Salmela-Aro et al., 2008; Salmela-Aro, Savolainen, et al., 2009) as well as dropping out of school (Bask & Salmela-Aro, 2013). Most adolescents cope with their teenage years without any serious emotional problems but there is still a considerable group of youngsters who struggle to cope with the changes of this transition period (Blackwell et al., 2007; Salmela-Aro, Savolainen et al., 2009). For this reason it is important to study the factors behind the decline of well-being in teenagers, and focus attention on the possible risk factors leading to burnout.

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Academic burnout comprises of three sub dimensions: exhaustion because of school demands, cynicism toward the meaning of school and feelings of inadequacy as a student (Salmela-Aro et al., 2008; Salmela-Aro, Kiuru et al., 2009; Salmela-Aro, Savolainen et al., 2009). However, in Estonian, as the word 'cynicism' does not reflect the actual content of the measured items we used the word 'indifference' instead of 'cynicism'.

Studying academic burnout in middle school has received little attention in Estonia (see Kikas, Jõgi et al., 2016) although there is reason to believe that the problem is becoming more evident. Although it has been documented that there are a decreasing number of students who regard going to school as unpleasant, the number of students who feel that their school-work is stressful, is on the rise (Aasvee et al., 2016).

Today's Estonia is a multiethnic society, comprising 69% Estonians and 25% Russians (Eesti Statistikaamet, 2018), and has a unique educational system where Estonian and Russian language schools operate side by side (Soll et al., 2015). Whereas differences between those language-groups have been studied in regard to academic results, less research has focused on differences and similarities in the emotional well-being and social-cognitive functioning of the two groups (but see Aasvee et al., 2016; Kikas, Jõgi et al., 2016; PISA, 2018). Also, work carried out on the adaptation of relevant measurement instruments is still scarce. As we cannot assume that the constructs assessed as well as the instruments used are universal across cultures (Marsella & Yamada, 2010) and it has been demonstrated that cultural factors as well as our language system, that is deeply cultural, determines the way individuals interpret their environment and organise their responses to that environment (Leighton & Hughes, 2005; Marsella, 2010), instruments that are used for assessing social-cognitive aspects of functioning, call for detailed analysis.

Hence, in the current study we aimed to study academic burnout of Estonian and Russian speaking eighth-graders in Estonia and analyse the associations between burnout and the students' ethnic background and cognitive abilities as well as beliefs and attributions supporting or hindering their well-being and coping. We measured academic burnout (Salmela-Aro, Kiuru et al., 2009) as a single factor construct since the three sub dimensions correlated strongly, even in one case demonstrating multicollinearity. The cognitive factors in the study were academic achievement as measured by the math ability test and general cognitive ability as measured by Raven progressive matrices. The social-cognitive factors we chose to study in more detail, as possible predictors of academic burnout, were the students' implicit ability beliefs or mindsets (Dweck et al., 1995; Schommer-Aikins et al., 2000) and academic psychological

buoyancy (Martin & Marsh, 2006). At the same time we focused on assessing the measurement invariance of the instruments in the two language-groups.

The sample consisted of 429 eighth-graders from five Russian ($n=174$) and seven Estonian ($n=255$) language schools. We used confirmatory factor analysis and measurement invariance analysis for assessing the validity and reliability of the measurement instruments. Analysis of variance and regression analysis were used to analyse differences in the burnout levels and associations with other variables.

We found that experiencing symptoms associated with burnout is common: most students reported having felt burnout symptoms associated with their studies. Whereas earlier studies have shown that when compared to their Russian-speaking peers, Estonian students were less satisfied with their schoolwork and reported feeling more exhaustion and indifference (Kikas, Jõgi et al., 2016), our results attested to similar levels of burnout in schools with Estonian and Russian study-language.

We were also interested in cognitive and social-cognitive factors that were significantly associated with burnout. In both language groups we found that neither math skills nor general ability were associated with burnout. This seems to contradict with earlier research (Kiuru et al., 2008; May et al., 2015; Salmela-Aro et al., 2008; Tuominen-Soini & Salmela-Aro, 2014), but as we used pure cognitive ability measured by cognitive tests as opposed to GPA, our results clarify earlier results and point to the fact that burnout can be experienced by students at all levels of intellectual ability.

Although cognitive factors failed to predict burnout in both language groups, the social-cognitive components played significant roles for both Estonian and Russian students. More precisely, we found a significant association with ability beliefs as well as academic psychological buoyancy. Higher levels of academic burnout were predicted by entity (fixed) beliefs of ability for Estonian and for the Russian sample and lower psychological buoyancy. Suggesting that, students who tend to regard intelligence as something fixed and students who have trouble with bouncing back from everyday difficulties or failures are more likely to experience symptoms of academic burnout.

We were also interested in assessing the predictive power of social-cognitive factors in different ability groups. It appeared that although lower psychological buoyancy was associated with higher levels of burnout at all levels of ability in both language groups, the association was strongest in Estonian students with high math ability. It has previously been noted that high achievement when accompanied with less adaptive social-emotional functioning, like high performance orientation or high levels of stress and depression symptoms, might

be associated with poor psychological health and higher levels of burnout or anxiety (e.g., Kaplan & Maehr, 2007; Tuominen-Soini & Salmela-Aro, 2014).

Further studies should focus on developing the knowledge and skills of implicit ability beliefs as well as psychological buoyancy among middle school students.

Acknowledgements

The research was supported by the Estonian Ministry of Education and Research.

Keywords: academic burnout, math skills, general cognitive ability, implicit ability beliefs, academic psychological buoyancy, Estonian and Russian study-language