Intensive studying or restlessness in the classroom: Does the quality of control matter?

Suvi Krista Westling [a, *], Kirsi Pyhältö [b, c, 1, 2], Janne Pietarinen [d], Tiina Soini [e]

[a] Department of Teacher Education, Faculty of Behavioural Sciences, University of Helsinki, Finland
[b] Faculty of Educational Sciences, University of Oulu, Finland, P.O.BOX 2000, FI-90014, Finland
[c] Faculty of Behavioural Sciences, University of Helsinki, P.O.Box 9, FI-00014, Finland
[d] School of Applied Educational Science and Teacher Education, University of Eastern Finland, P.O. Box 111 (Yliopistokatu 2), 80101 Joensuu, Finland
[e] School of Education, University of Tampere, Virta (Åkerlundinkatu 5), 33014, Finland

HIGHLIGHTS

- Lessons consisted teacher-, shared- and competitive regulation.
- Emotional tone of interaction was warmest in the lessons with shared-regulation.
- Students concentrated on-task behavior most in the lessons with shared-regulation.
- The teacher regulated lessons had second warmest emotional tone of interaction.
- The lessons with competitive regulations had most off-task behavior.

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ABSTRACT

The way lessons are regulated by the teacher, who may support students' autonomy or use structure and control, influences emotional tone of classroom interaction and students' on-task behavior. The aim of this study was to explore the patterns of lesson regulation and its dynamics between students' on-task behavior and the emotional tone of classroom interaction. Two groups of seventh and eighth graders were studied by semi-structured observation (six weeks per class, 146 lessons). The results suggests that shared regulated lessons keep students on-task and facilitate positive atmosphere better than teacher regulated lessons, whereas lessons with competitive regulation do the opposite.

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1. Introduction

The first years in secondary school are critical to students' school engagement, their school trajectory, and hence affect their future lives (Eccles & Roeser, 2011; Hascher & Hagenauer, 2010; Roeser, Eccles, & Sameroff, 2000). An increased need for autonomy and a growing interest in peer relations compete with students' academic goals (e.g., Deci & Ryan, 2008; Kilian, Hofer, & Kuhnle, 2010). At its worst, a chaotic classroom environment and teachers' dysfunctional attempts to control it may provoke a conflict that damages the emotional tone in the classroom and disengages the students from their studies (Westling, Pyhältö, Pietarinen, & Soini, 2013; Hascher & Hagenauer, 2010; Sava, 2002). In turn at best, a learning environment with collaborative learning activities and emotionally warm regulation supports students' autonomous involvement significantly (Hamre & Pianta, 2006; Westling et al., 2013). Accordingly, the structure of classroom activities and especially, the level of control exercised by the teacher and the students, to regulate learning and other classroom activities, has a significant impact on students' on-task behavior and the emotional tone in the

* Corresponding author. P.O. Box 9 (Siltavuorenpenger 5A), 00014 Helsingin Yliopisto, Finland.
E-mail addresses: suvi.westling@helsinki.fi (S.K. Westling), kirsi.pyhalto@helsinki.fi (K. Pyhältö), janne.pietarinen@uef.fi (J. Pietarinen), tiina.soini@uta.fi (T. Soini).
[1] Visiting address: Yliopistokatu 9, room 357.
[2] Visiting address: Siltavuorenpenger 5A, room 415.

classroom which, in turn, affect students' learning outcomes (Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Emmer, Edmund, Everston & Carolyn, 1980; Hamre & Pianta, 2005; Klem & Connell, 2004; Mainhard, Brekelmans, & Wubbels, 2011; Patrick, Turner, Meyer, & Midgley, 2003; Pianta, 2006; Reeve, 2009; Reeve, Jang, Carrell, Jeon, & Barch, 2004; Walker, 2008; Wubbels & Brekelmans, 2005). Yet, the evidence on the effects of teacher control and lesson regulation is somewhat inconsistent. The results of the prior studies of teacher control, authority and interpersonal behavior imply that not only *the level* of teacher control and dominance nor the extent of student autonomy and freedom determine the student on-task behavior, but actually *the nature of control* plays a vital role. Hence a better understanding of the regulation of the classroom activities from the aspect of control needs to be attained. The present study aims at exploring the different patterns of regulation of classroom activities in relation to students' on-task behavior and emotional tone of the classroom among 7th and 8th graders in a Finnish lower secondary school. The extensive data obtained from the observed lessons enable exploration of the actual recurring behavior of both, the teachers and the students in authentic classroom settings.

2. Student autonomy, structure and teacher control

Active role and autonomy have been emphasized as key elements enhancing student learning already for several decades (Assor, Kaplan, & Roth, 2002; Lonka, Hakkarainen, & Sintonen, 2000; Vermunt & Verloop, 1999). For example it has been shown that students whose teachers use more autonomy-supportive instruction are more involved in tasks (Reeve et al., 2004). Moreover, autonomy support combined with a sufficient amount of structure is shown to promote students' engagement in learning with more dedication, while too minimal or a complete lack of structure is detrimental to student learning (e.g., Assor et al., 2002, 2005; Deci & Ryan, 2008; Mäkitalo-Siegl, Kohnle, & Fischer, 2010; Reeve, 2009). It has been also shown that students in a more clearly structured class learn more than students in the similar learning environment with less teacher-given structure (Mäkitalo-Siegl et al., 2010).

The way classroom activities are regulated – in other words, how the teachers use structure and control – either restricts or supports students' autonomy. However, the evidence on the effects of teacher control in the regulation of classroom interaction is somewhat inconsistent: Students with controlling teachers have been shown to adopt more externally regulated and superficial strategies, and to concentrate their attention on avoiding mistakes, blame and rebuke from the teacher rather than on learning (Flink, Boggiano, & Barrett, 1990; Pelletier, Legault, & Séguin-Lévesque, 2002). Yet high demands and firm control, characterized by balanced but determined teacher behavior combined with clear structure and objectives respecting students' personal competence, seem to promote positive student outcomes (Barber, 1996; Baumrid, 2005; Kleinfeld, 1975; Walker, 2008; Wubbels & Brekelmans, 2005). The extent to which teachers are dominant and demanding seems to have a significant impact on students' positive attitude toward the subject being studied, motivation, performance and regulation of their learning behavior (see e.g., Kleinfeld, 1975; Maulana et al., 2011; Wubbels & Brekelmans, 2005). Multiple studies show that teacher authority and dominance enhances students' learning outcomes and balanced development more than student freedom and teacher permissiveness (e.g., Maulana, Opdenakker, denBrok, & Bosker, 2011; Telli, Brok, & Cakiroglu, 2007 – 2008–; Walker, 2008; Wubbels & Brekelmans, 2005). In addition, Westling and her colleagues (2013) found that students expected strong teacher control and regulation in multiple school situations; they anticipated these actions not only in academic lessons, but also in ensuring social justice in the class. Teachers' rationales—which allow the need for autonomy to be met, as the students understand, why certain things are done—help the students to conform with teacher instructions even when they are strict (cf. Assor et al., 2002; Deci & Ryan, 2008; Wubbels & Brekelmans, 2005). On the contrary, teachers' indifference to problematic situations of schooling was perceived negatively (Westling et al., 2013). This is supported by the findings that students who have perceived their teachers to behave submissively – allowing students' dominance and freedom – are less motivated and have lower-achievement than students with less freedom and dominance (Kleinfeld, 1975; Telli et al., 2007–2008; Wubbels & Brekelmans, 2005).

3. Emotional tone of classroom interaction and the quality of control

The way activities are regulated in the classroom affects the emotional tone of teacher-student interaction which, in turn has been identified as a crucial regulator for students' affective and cognitive outcomes (Hamre & Pianta, 2005; Kleinfeld, 1975; Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008; Reeve, 2009; Walker, 2008; Wubbels & Brekelmans, 2005). Teachers' warm interpersonal behavior, co-operation, patience and understanding have been found to increase students' positive attitude toward schooling, engagement and at-risk students' persistence, supporting internally regulated motivation as well as social and academic involvement (Knesting, 2008; Maulana et al., 2011; Ryan & Patrick, 2001; Sava, 2002; Telli et al., 2007–2008; Westling et al., 2013; Woolley & Bowen, 2007; Wubbels & Brekelmans, 2005). Use of recognition and discussion with students has been found to relate to greater liking of the teacher and greater belief that the teacher's intervention was necessary and justified (Lewis, Romi, Katz, & Qui, 2008). In turn, hostile, mistrusting and distant teacher behavior has been shown to decrease introjected motivation and achievement as well as to increase avoidance behavior (Maulana et al., 2011; Patrick et al., 2003; Wubbels & Brekelmans, 2005).

Teachers' way of regulating the classroom activities and use of control may vary according to the roles and patterns of interaction activated by the situations or contexts (see Andrews, 2007; Bargh & Chartrand, 1999; Emmer et al., 1980). However, it is not only the teacher who holds the control and authority and thus influence the emotional tone of classroom interaction, but the students also bring their emotional dispositions and learned behavioral patterns to the lesson, affecting its trajectory and contributing substantially to the emotional tone (Korthagen, Attema-Noordewier, & Zwart, 2014; Lewis, 2001; Van Tartwijk, Brekelmans, Wubbels, Fisher, & Fraser, 1998). The way students behave in terms of creating initiatives and engaging in on- or off-task behaviors affects teachers' reactions and their way of responding to the students (Emmer et al., 1980). Students may accept, ignore, or confront teachers' offers and even self-authorize themselves. In that sense, regulation of the interaction in the classroom is always shared to a certain extent (e.g., den Brok, Bergen, Stahl, & Brekelmans, 2004; Vermunt & Verloop, 1999).

Teachers' *coercive control*, which refers to using pressure and relying on external rewards or punishments, neglecting rationales, rejecting students' complaints and their expressions of negative affect, as well as assertion of power (Assor et al., 2005; Barber, 1996; Reeve, 2009), has been found to have a negative impact on emotional tone in the classroom causing anger and anxiety, decreasing motivation among students and inhibiting meaningful learning (Assor et al., 2005; Boekaerts, 1997; Mainhard et al., 2011; McCombs & Marzano, 1990; Reeve, 2009; Zimmerman, 1995, 1998). For example Lewis (2001) found that students who experienced