## **Does teacher communication and ICT tools supported cooperation reduces teacher burnout?** / Pnina Adi Cohen

## Abstract

In recent years we have seen an increase in the use of collaborative work and ICT-based communication among teachers in schools in Israel. Does this phenomenon indirectly reduce the level of burnout in teachers? This study examined a model whereby increasing collaborative work and ICT-based communication increases perceived collegiality, and perceived collegiality in turn reduces teacher burnout. Before presenting the model and the findings of the study that examined it, I will refer to the literature regarding each of these elements and the relationship between them.

Teacher burnout is a well-known phenomenon in the education system in Israel and the world. Mckinney-Thompson (2015) argued that the issue of stress and burnout among teachers has worsened in the past four decades. Notably, teacher burnout may influence, among other things, teachers' health, the ability to persist in teaching, and teaching ability. For this reason it is important to find factors that can help reduce the phenomenon. Arbiv-Elyashiv and Zimmerman (2013) have argued that there is a high degree of burnout among teachers who find it difficult to cope with the demands of the job and who teach at low-resource schools. Bousquet, Roloff, and Brown (2012) noted that the symptoms of an educator who has experienced burnout are low morale, low self-esteem, and physical exhaustion, and that teacher burnout is the most common reason for effective teachers leaving the profession. It was further argued that the higher a teacher's morale, the higher student achievements are. According to Reichel (2008), those who suffer from teacher burnout and stress are mostly young children or adolescents, who are unable to cope with these phenomena. Thus, it is very important to identify the causes for stress and intensity of burnout.

A key concept in team work is "collegiality". Robinson (2015) defines collegiality as a variety of behaviors that reflect caring and concern for others. It was noted that collegiality includes working in cooperative ways. In the literature (Ham, 2011; McClure, 2008; Robinson, 2015) collegiality is described as reducing teacher turnover, raising teachers' belief in their abilities, enhancing productivity, and helping in finding meaning, solving problems, and coping with uncertain situations. It was also claimed that collegiality improves teachers' work satisfaction.

In order to define collaboration and ICT-based communication among teachers, the term "Computer Supported Cooperative Work" (CSCW) was chosen. This term was coined in the Eighties (Koch, 2008; Wolfing, Carreras, Antonia & Marc, 2010) and when Web 2.0 and social networks became popular this field was extended to support collaboration in organizations (Koch, 2008). According to Wolfing et al. (2010) this field includes a Collaborative Working Environment – CWE.

Burnout focused studies indicate that it can be reduced by social support, cooperation, and positive social interactions (Malach-Pines, 2011; Friedman & Lotan, 1985; Shirom, 1995; Rudow in Vandenberghe et al., 1999; Firstater, 2012; Katz, 2012). Studies have also shown that the sense of collegiality raises the level of teacher satisfaction from work and reduces job alternations, which is one of the negative effects of teacher burnout (Ham, 2011; McClure, 2008; Robinson, 2015). However, as far as we know, no research in this field has examined if ICT-based collaboration among teachers can constitute a strong enough relationship between peers so that it improves the sense of collegiality of teachers at school and reduces the level of

teacher burnout.

This study examined a new model provided by the author, according to which ICT-based collaboration in school as an organization and/or the teacher as an individual increases teachers' sense of collegiality, which in turn helps reduce teacher burnout (see fig.1 for an illustration of the model).

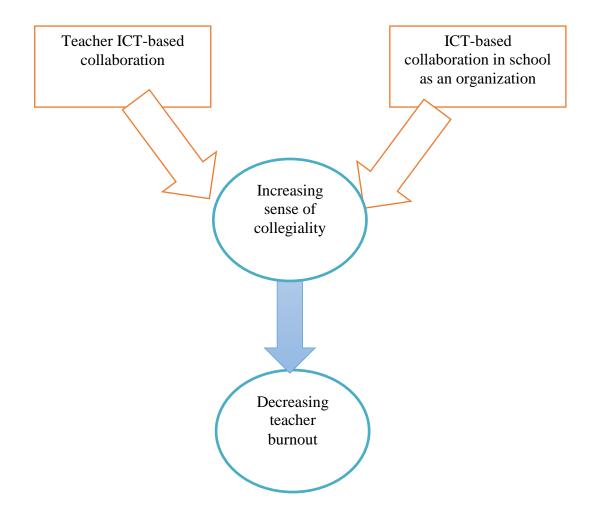


Figure 1. The research model: ICT-based collaboration in school and/or individual teacher increases the teachers' sense of collegiality, which in turn helps reduce the teacher burnout.

To examine the model, a quantitative study was conducted using an

anonymous, self-administered questionnaire, which was completed by 107 teachers, 88 of which were women. The age of the study participants ranged between 22–67 years old (M=43.31, SD=9.53). The questionnaire consisted of five sections that explored the level of ICT-based collaboration in school as an organization, the level of ICT-based collaboration of teachers, sense of collegiality, the level of teacher burnout, and background variables and personal characteristics. The questionnaire was based on existing questionnaires that address these topics and which were adapted to the conditions in Israel. It was validated by experts and tested for reliability as internal consistency using Cronbach's alpha test.

The findings partly confirmed the model. It was found that the higher the level of ICT-based collaboration in school, the higher the teachers' sense of collegiality (r (107)=0.17, p <0.05). No significant correlation was found between the level of ICT-based collaboration of teachers and their sense of collegiality. It was found that the higher the sense of collegiality, the lower the level of burnout (r(107)= -0.23, p <0.01). According to the a priori model, ICT-based collaboration indirectly affected the prevention of teacher burnout: ICT-based collaboration in school increased the sense of collegiality, which in turn moderated teacher burnout. It should be stressed, however that correlation does not imply causation, and each of the correlates can equally be explained by a causation opposite to the one presented in our a priory model. Other findings showed that women experience a higher sense of collegiality than men and that the level of burnout decreases with participant seniority. The later finding may seem counter-intuitive, however it is explained using prior scientific literature at the discussion section.

Beyond the empirical findings and theoretical conclusions, the research has practical implications. The findings of this study indicate that it is important to promote ICT-

based collaboration at the school level in order to bring the teachers closer to each other. This tool can provide an additional dimension but cannot be a substitute for the physical dimension. Teachers that belong to the community on a virtual level as well, will feel a greater sense of collegiality and a lower level of burnout. Such a teacher will serve as a positive model to his students and colleagues. A teacher who is not burnt out, a teacher that feels as part of a group, can offer his best to his students. Such a teacher can present his students with a quality of teaching that is more diverse, adapted, interesting, and generally of higher quality. Such a teacher can be more accepting of his students and raise their level of achievement. This study raises the need for future studies, which will examine the relationship between promoting an organizational culture of ICT-based collaboration and the contribution of such a culture to teachers and students.

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