

Elementary Teachers' Work-Related Stressors and Strain

October 14, 2017

YoungAh Park, Ph.D.

*School of Labor and Employment Relations
University of Illinois at Urbana-Champaign*

Robert Bruno, Ph.D.

*Project for Middle Class Renewal | Labor Education Program
School of Labor and Employment Relations
University of Illinois at Urbana-Champaign*

Lucille Headrick, Doctoral Student

*School of Labor and Employment Relations
University of Illinois at Urbana-Champaign*

This research project was possible through the *Research Support Award by Campus Research Board at the University of Illinois at Urbana-Champaign (UIUC)*. We thank Campus Research Board for its generous research fund. This research project protocol was approved by UIUC Institutional Review Board (IRB # 17455).

ABOUT THE PROJECT FOR MIDDLE CLASS RENEWAL

The Project for Middle Class Renewal's mission is to investigate the working conditions of workers in today's economy and elevate public discourse on issues affecting workers with research, analysis and education in order to develop and propose public policies that will reduce poverty, provide forms of representation to all workers, prevent gender, race, and LGBTQ+ discrimination, create more stable forms of employment, and promote middle-class paying jobs.

Each year, the Project will be dedicated to a number of critical research studies and education forums on contemporary public policies and practices impacting labor and workplace issues. The report that follows, along with all other PMCR reports, may be found by clicking on "Project for Middle Class Renewal" at illinoislabored.org

If you would like to partner with the Labor Education Program in supporting the work of the Project or have questions about the Project please contact Bob Bruno, Director of the Labor Education Program at (312) 996-2491.

Project for Middle Class Renewal
Labor Education Program
School of Labor and Employment Relations



Executive Summary

The objectives of this study were, first, to examine the association between teachers' stressors (Information and Communication Technologies (ICT) demands, quantitative and emotional demands, organizational constraints) and potential strain outcomes (emotional well-being, sleep, physical well-being, turnover, job satisfaction), and second, to see if resources (social support, school policy) may help to reduce the potentially negative effects of these stressors on strain outcomes.



Elementary school teachers from the Illinois Education Association and the Illinois Federation of Teachers ($N = 1,117$) completed an initial survey and five weekly surveys to assess their stressors and strain outcomes. The results showed that teachers worked significant overtime hours and face quantitative and emotional demands that are detrimental to their well-being and job outcomes. In addition, ICT demands also have a significant negative effect on teacher well-being. However, teachers who work in schools with a formal policy for electronic communications with parents experience less ICT demands. Recommendations for school districts and teacher unions are provided based on the findings.

TABLE OF CONTENTS

Introduction	2
Statement of Purpose	2
Significance of the Study	2
Methods of the Study	2
Limitations of the Study	3
Findings	3
Demographic Profile	3
Sources of Stress and Outcomes	4
Initial Survey Results	4
Weekly Survey Results	4
Organizational Resources	5
Conclusion	8
Recommendations	9
References	10

INTRODUCTION

International surveys conducted by the European Trade Union Committee for Education (ETUCE) found that teachers in their union suffer significantly from stress (ETUCE, 2011). Furthermore, survey data in the United States reveals that teaching is a “high stress” profession (Kyriacou, 2000). The harm caused by this stress is evident by the high rates of teacher attrition and teacher shortages. Despite these findings, teacher stress has yet to be examined over time. Also, researchers have yet to examine how the increasing use of communication technology (i.e., email, text messages) has impacted teachers’ well-being and job outcomes. It seems many teachers have to deal with constant pressure to respond to emails throughout the day. Many teachers even get email sent directly to their personal phone. This can disturb teachers even while they are away from work. These messages may make it more difficult for teachers to control their emotions, which may lead to increased stress and turnover intentions. In addition, they suffer stress from difficult students and inadequate school resources such as workplace social supports and school policies.

Statement of Purpose

To address these issues, we conducted a weekly survey study to assess the stressors and strains of teachers in Illinois and potential buffers for a period of five consecutive work weeks. More specifically, our objective was to examine the impact of stressors (Information and Communication Technologies [ICT] demands, quantitative and emotional demands, and organizational constraints) on potential strain outcomes (emotional and physical well-being, sleep, turnover intentions, job satisfaction). In addition, we sought to determine if resources (social support, school policy) would help to reduce the potentially negative effects of teacher work stress on strain outcomes.

Significance of the Study

The results will help school districts and unions better understand teachers’ stress experience. In addition, the results of this research may help to inform policy and practices to combat these issues. For example, the results may help school officials and teacher representatives to develop policies that place appropriate limits on the communication expectancies of parents based on the results of this study with the goal to improve teachers’ experience and ultimately improve teacher retention.

Methods of the Study

First, during the last week of March 2017 (after spring break), members of the Illinois Education Association (IEA) and the Illinois Federation of Teachers (IFT) received a recruitment email with a description of the research and a link to complete an initial online survey. We requested that members who were elementary (K-6th) school teachers participate in this research. Once they clicked the link, participants read through the informed consent page and if they accepted the terms, they hit a next button that then lead them to the survey. The initial survey assessed participants’ demographics and characteristics, the communication policies of their school, and levels of social support provided by coworkers and school officials. Two weeks following receipt of the initial survey (April, 2017) email requests for weekly surveys began. At the end of the week for five weeks, participants received an email with a link to the weekly survey. The weekly survey assessed weekly stressors (ICT demands, quantitative and emotional demands, and organizational constraints) and potential strain outcomes (emotional and physical well-being, sleep, turnover intentions, job satisfaction). Surveys were matched week to week by unique IDs that



participants created during the initial survey. Once the study ended, all participants were emailed a thank you note and an electronic booklet with recommendations for dealing with work-stress. Additionally, participants were entered into a raffle to win one of four hundred ninety \$50 online gift cards. These gift cards were distributed once the study had ended. Finally, simple statistical techniques were used to tabulate the results of this study.

Limitations of the Study

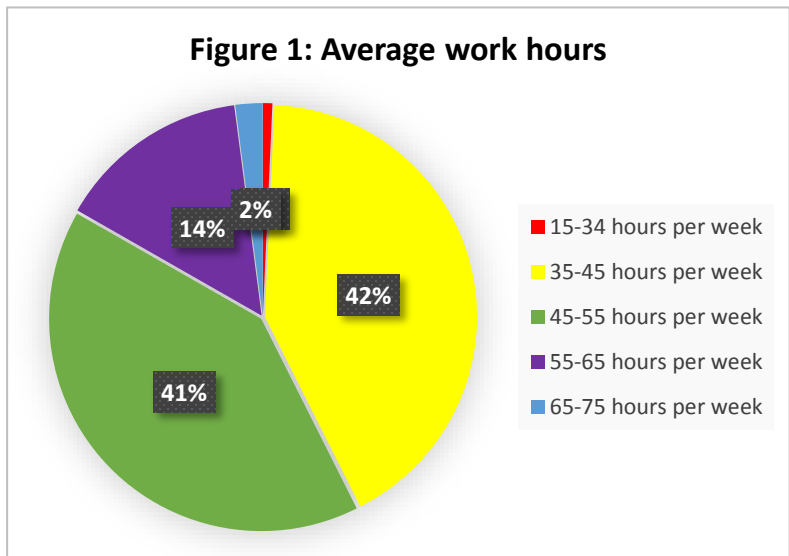
This study may be limited through the use of online weekly questionnaires as a data collection instrument. Because weekly questionnaires had to be short as to not burden the participants, areas that may have been affected by stress may not have been included in the questionnaire. Also, all resources that may be available to teachers for managing stress may not have been included in the study. The study may also be limited by the use of a convenience sampling method. The sample of union members for the study may not be representative of the total population of elementary school teachers in the state of Illinois. Care should be taken when generalizing these findings to the larger population of teachers. All attempts have been made to minimize the effects of these possible limitations on the study.

FINDINGS

Questionnaires were distributed to IEA and IFT members. A total of 1,117 teachers completed the initial survey. Of these 1,117 participants, 37% did not complete any weekly surveys, 25% completed 1-2 weekly surveys, and 38% completed 3 or more weekly surveys. The findings will be presented below in three sections according to the following characteristics: Demographic Profile, Sources of Stress and Outcomes, and Organizational Resources.

Demographic Profile

1,117 teachers completed the initial survey. Of these individuals, 86.7% belonged to the IEA, while 12.7% belonged to the IFT (0.6% preferred not to answer). The sample consisted mostly of female respondents (92.7%). Most respondents identified themselves as Caucasian (90.1%), and as teachers with a Bachelor’s (27.9%) or Master’s degree (70.6%) as their highest education level. The average age of participants was 40.21 years. They had been working as a teacher an average of 13.5 years. They worked an average of 49.7 hours per week. In particular, looking at the distribution of work hours in Figure 1 below, most participants worked 45 or more hours per week. However, 16% invested over 55 hours in school related work. Additionally, we found that teachers who responded to the weekly surveys worked an average of 7.92 hours of overtime per week.



8.8% were kindergarten teachers, 12.5% were first grade teachers, 9.7% were second grade teachers, 10.9% were third grade teachers, 11.7% were fourth grade teachers, 12.3% were fifth grade teachers, and 5.6% were sixth grade teachers. 28.6% identified as teaching ungraded or other classes, such as special education or teaching multiple grades. 42.9% of teachers in the sample had children under 18 years old living at home. 73.1% lived with a spouse or partner.

Sources of Stress and Outcomes

Initial Survey Results

In the initial survey, we found that the pressure to respond to work-related electronic messages (i.e., emails, texts), known as telepressure, was positively and significantly correlated with stress in general ($r = .15$). In other words, the more pressure there is to quickly respond to work emails, the more stress teachers will experience. This stressor was prevalent among the participants as 65% responded that they “agree” or “strongly agree” with the statement that they feel a strong need to immediately respond to electronic messages from work-related people (e.g., parents, students). Relatedly, we found that after-hours communication expectations were positively and significantly correlated with stress in general ($r = .24$). The more parents expect teachers to respond to their emails after school work hours have ended, the more stress teachers experience.

In addition, we found that the amount of freedom a teacher has over how they do their work was negatively related to stress ($r = -.35$). The more autonomy teachers have over their work tasks, methods, and decision making is related to experiencing less stress. If however, teachers have little workplace autonomy, they experience more stress. In general, we found that most teachers have a moderate level of autonomy over their work. The average level of job autonomy was 3.43 on a 1 to 5 scale.

We also found that the ability to control the boundaries between a teacher's work and personal life was negatively related to stress ($r = -.30$). In other words, if a teacher cannot control the boundaries between their work and non-work life, the more stress in general they may experience. In general, we found that most teachers have a moderate level of control over their work and home boundaries. The average level of boundary control was 3.31 on a 1 to 5 scale.

Weekly Survey Results

Teachers experienced a multitude of stressful demands on the job each week. Across the 5 weeks, the average level of quantitative work demands (“had to work very fast,” “had to work very hard,” “required a great deal of work to be done,” and “not enough time for me to finish my work this week”) was 4.08 on a 1 to 5 scale. Their average level of quantitative work demands were also found to be negatively related to job satisfaction ($r = -.10$). The more teachers experience quantitative demands at work, the less likely they are to be satisfied with their job. Also, it was positively and significantly related to insomnia ($r = .22$), physical symptoms ($r = .19$), and turnover intentions ($r = .10$). In other words, a high level of quantitative demands is related to poor health and sleep as well as greater intention to quit their job.

In addition, teachers frequently received work-related contacts (emails, text messages, phone calls, etc.) during their evening hours at home. On average across the 5 weeks, they received 7.96 work-related contacts during their off-work hours each week. These work-related contacts can disturb the time teachers have to recover from work stress. As a result, the average number of evening contacts each week was positively related to participants' average level of insomnia ($r = .15$) and physical symptoms ($r = .13$). The more teachers are disturbed by work messages during non-school time, the worse their sleep and physical well-being are in general.

Additionally, we also surveyed teachers on the organizational constraints they experienced. We asked teachers how often during the week they found it difficult or impossible to do their jobs because of poor or lack of equipment or supplies, educational or school rules and procedures, other employees, their supervisor, inadequate training, interruptions by other people, lack of necessary information about what to do or how to do it,

conflicting job demands, inadequate help from others, incorrect instructions, and difficult students. The means (averages) for each constraint are presented in Table 1. The highest occurring interferences with work were difficult students and interruptions by other people. Across the 5 weeks, 27.7% of teachers found it difficult or impossible to do their job 2-3 times per week

insomnia ($r = .22$), physical symptoms (e.g., upset stomach, backaches, chest pain, fatigue, headaches, etc.; $r = .24$), and turnover intentions ($r = .20$). In addition, the level of emotional demands placed on teachers was negatively related to emotional well-being ($r = -.10$) and job satisfaction ($r = -.33$). Teaching often involves emotionally draining work. The emotional demands it places on teachers is related to poor sleep, health, and well-being as well as being dissatisfied with their work and wanting to quit.

Table 1 Organizational Constraints

(0 = Never, 1 = Once per week, 2 = 2-3 times per week, 3 = 4 or more times per week)

Item	Mean
Poor or lack of equipment or supplies	0.83
Educational or school rules and procedures	0.96
Other employees	1.03
Your superiors (i.e., principals, other administrators)	0.87
Inadequate training	0.51
Interruptions by other people	1.62
Lack of necessary information about what to do or how to do it	0.95
Conflicting job demands	1.25
Inadequate help from others	1.03
Incorrect instructions	0.53
Difficult students	1.97

due to difficult students and 41.6% found it difficult or impossible to do their job 4-5 times per week due to difficult students. In addition, across the 5 weeks, 36.8% of teachers found it difficult or impossible to do their job 2-3 times per week due to on-line and/or in-person interruptions by other people (other than students, superiors and colleagues) and 21.9% found it difficult or impossible to do their job 4-5 times per week due to interruptions by other people. On the positive side, very few teachers experienced interference with work due to inadequate training or incorrect instructions.

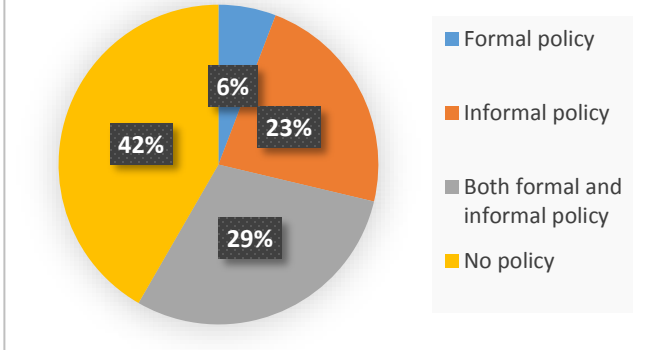
Teachers also experienced significant emotional demands at work. The level of emotional demands at work (“work was emotionally demanding,” “had to deal with demanding students,” “students who didn’t treat you with the appropriate respect and politeness,” “student issues that personally touched you this week”) was positively related to

work stress, so this may be a serious concern for teachers. As follows, negative rumination was positively and significantly related to insomnia ($r = .33$), physical symptoms ($r = .27$), and turnover intentions ($r = .23$). In addition, their level of negative rumination was negatively related to emotional well-being ($r = -.19$) and job satisfaction ($r = -.37$). Teaching involves so-called emotional labor that can interfere with recovery from work stress thereby leading to poor health and job outcomes.

Organizational Resources

In the initial survey, we assessed some resources that may be beneficial to teachers’ job and health-related outcomes. These include support from peers, support from supervisors, and policies regarding parental communication with teachers. Support from peers was high among the participants – average of 4.08 on a 1 to 5 scale. Supervisor support was moderate – average of 3.62 on a 1 to 5 scale. Both peer and supervisor

Figure 2: School policy for electronic communications with parents



support appears to be beneficial for workers as both were significantly related to lower weekly levels of insomnia, physical symptoms, and turnover intentions, as well as higher weekly levels of emotional well-being and job satisfaction. These findings reveal that having support from coworkers and supervisor may reduce the negative affect of stressors on health and job outcomes.

In addition, we also asked participants if their schools have specific formal or informal policies or practices to guide parents on how to best communicate with teachers using phones, emails, and text and voice messages. While a majority of schools had either a formal or informal policy, 42% had no policy on parent-teacher communications. Teachers were also asked to describe their school’s communication policies. In Figure 2, the percentages of those that indicated they have a formal policy, an informal policy, both formal and informal policies, and no policy are displayed. In Table 2 on page 7, examples of formal policies as described by participants are displayed. In Table 3 on page 7, examples of

informal policies as described by participants are displayed.

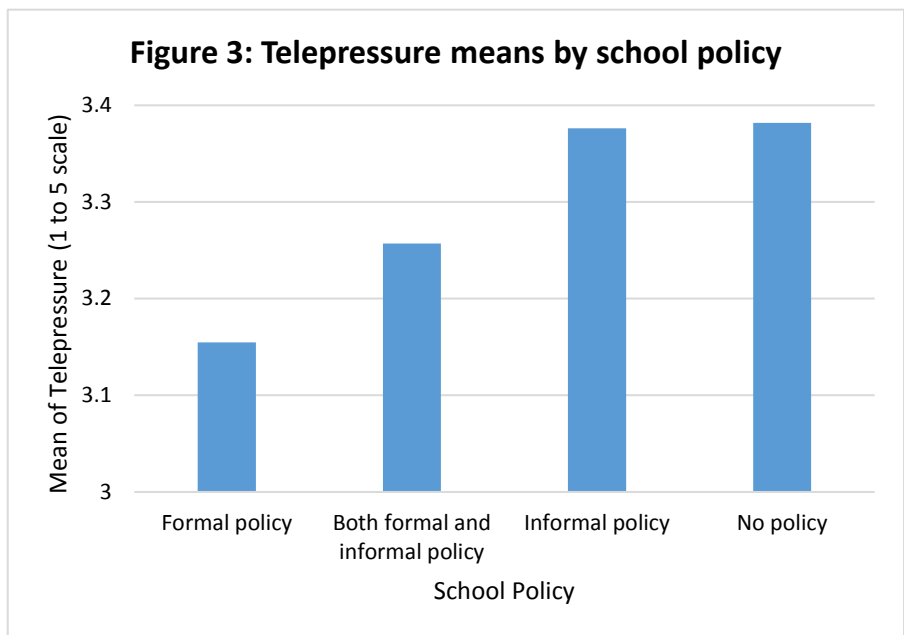
Interestingly, teachers who had a formal policy for electronic communications with parents experienced on average significantly less telepressure (an overwhelming urge to immediately respond to work-related messages)



than those who had only an informal policy or no policy. There were no significant

differences in telepressure for teachers who had just a formal policy and those who had both informal and formal policies. In Figure 3 below, the means of telepressure for each type of policy are displayed. Teachers who work in schools with a formal policy feel less pressure to respond right away to work-related emails and text messages.

Figure 3: Telepressure means by school policy

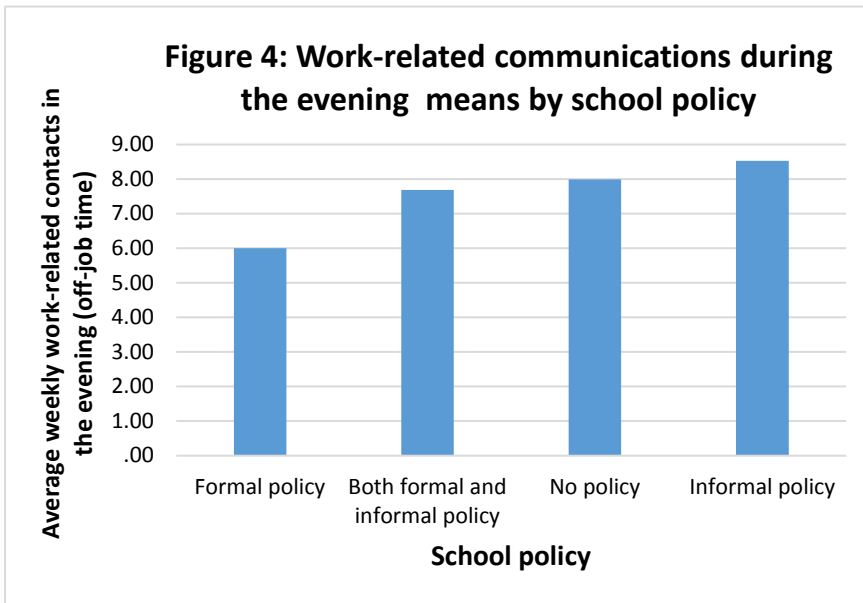


In addition, teachers who work under a formal policy also experienced significantly less work-related contacts during their evening hours at home than those who had only an informal policy or no policy. There was also a small difference in the average number of weekly contacts for those who had only a formal policy and those who had

Table 2: Examples of Formal Policies
"Messages from parents need to be answered in 24-48 hours."
"The district handbook outlines communication policies for educators. They have 24 hours to respond."
"Parents must contact us through email or through a student communication book. We also document conversations in the online system Powerschool."
"Parents do not have access by policy to our cellphone numbers and we are told not to share that number with parents. I agree with that practice!"
"Parents are not allowed to interrupt instruction and staff cell phone numbers are not given out."
"My school principal provides a school guide for parents during our school open house. This booklet contains helpful information about our school policy to guide parents on how best communicate with teachers."
"The biggest policy is that we have 48 hours to respond to parent communication. The principal communicates this to parents, so they understand that they may not hear back from us right away. I feel this policy is well-understood by our community and respected. "
"Our school policy in regards to teacher emailing parents and vice versa states that parents need to be aware that teachers have other responsibilities and will reply to email communication in 24 hours."
"We have a 24 hour rule. We need to respond within 24 hours during the week (not weekends). We can only use our school emails and phone numbers."
"The parent handbook for my school explicitly states that parents may contact teachers through their professional email and school phone numbers, but may not contact teachers via cell phones (e.g., text messages, calls, etc.) or social media."

Table 3: Examples of Informal Policies
"At our Meet the Teacher Night (first evening of new school year) parents are encouraged to write notes in the planner or to call the school secretary to communicate with the teacher. "
"I inform parents at the beginning of the year that email is the best way to reach me. There is no direction as to whether or not we should be answering on nights and weekends. I feel that it should be more clear the expectations for off hours communication."
"At the beginning of the year, teachers have a back to school night, where they tell parents their preference for how to be contacted. The principal tells us over breaks that she does not expect us to have to answer calls or emails."
"Lip service is given to the idea that you don't have to respond on weekends; parents get upset if you don't. Staff bends over backwards for parents."
"Dealing with parents is in a teacher to teacher basis. It is, however, expected, that some mode of communication (email) is being used frequently."
"Informally the practice is for parents and teachers to email in evenings/nights or weekends."
"Each teacher tells parents how to best communicate with her."
"Teachers use different forms of communication depending on their preferences (using both personal and school related accounts)"
"There are no clear guidelines. Teachers are expected to create their own means and informal guidelines for communication, which causes a lot of differences between teachers and grade levels. "
"Informal policy is to try to respond to parents in some way within 24 hours after a reasonable receipt time of an email."
"Parents are encouraged to contact teachers via school phone or email. No parameters are given as to what time of day to contact. It would be nice if parents would make contact during school hours. "
"No formal policy. No parent orientation. Terrible direction from principal. Not sure parents are even fully informed by principal on how to contact teachers. The informal policy is that parents typically call teachers at school. "

both informal and formal policies. In Figure 4 below, the means of work-related contacts during the evening for each type of policy are displayed.



some parents will look them up on social media (i.e., Facebook) and send work-related messages to their personal accounts.

Although this study cannot determine causation, there is a correspondence between teachers' quantitative and emotional work demands and their health-related outcomes (insomnia and physical symptoms) as well as job-related outcomes (turnover intentions and job satisfaction).

Also, negative rumination (i.e., thinking about bad things that happened at work) was one of the most prevalent stressors for teachers. Many teachers seem to have trouble "switching off" from

the stressful aspects of the work when they are at home. Negative ruminations were related to poor well-being (emotional well-being, insomnia, and physical symptoms) and poor job outcomes (job satisfaction and turnover intentions).

However, this study also identified some potential resources that may be useful to teachers for combating stress. Autonomy over work and work boundaries was related to lower levels of stress. When teachers have a say in how and when they do their work, they are better able to cope with stress.

Additionally, social support from peers and supervisors is related to greater well-being and job outcomes. Workers in this study reported high-levels of peer support. Union members seem to play a significant role in helping each other manage the demands of teaching.

Finally, a formal school policy for communications with parents may help reduce ICT demands (i.e., pressure to respond to emails, work-related contacts during the evening).

CONCLUSION

On the basis of the findings, several conclusions concerning stressors (Information and Communication Technologies [ICT] demands, quantitative and emotional demands, and organizational constraints) on teachers can be drawn. First, it is evident that teachers are working more than 40 hours a week, even though most collective bargaining agreements in Illinois stipulate the length of a "school day" which typically amounts to no more than 40 hours a week. These extended hours could have detrimental effects on teachers' well-being in the long-term and also interfere with the time teachers have to recover from their emotionally draining teaching work on a weekly basis.

In addition, ICT demands (telepressure, after-hours communication expectations, and work-related contacts during off-time) seemed to be detrimental to teachers' well-being. Electronic communication is becoming the preferred mode of communication for most parents. Parents seem to expect immediate, 24/7 access to teachers. Some teachers in this study even described how

RECOMMENDATIONS



Based on the findings and conclusions in this study, the following recommendations are made:

1. Unions and school officials should inform and raise awareness about teachers' work-related stressors, especially about the possible health problems and turnover that may result from ignoring these issues.
2. School officials and unions should promote efforts at a school-level to avoid or reduce work-related demands and stressors (e.g., quantitative and emotional demands, organizational constraints). For example, school management, in consultation with the workforce, should discuss how they can minimize quantitative demands and organizational constraints, such as difficult students or interruptions by others. However, we realize that not all demands can be reduced, and therefore schools and unions should also focus on helping teachers better cope with those demands and recover from the stress as needed.
3. Teachers should adopt practices that encourage psychological detachment from negative thoughts about work during leisure time. For example, a strategy such as turning off work-related email on one's personal phone can make it easier to mentally distance oneself from work outside of the office. In addition, separate email accounts, phones, or computers for work and nonwork activities are strategies for enhancing the ability to psychologically detach from work.
4. School officials and unions should negotiate for specific and joint guidelines for communicating with students' parents. As described by teachers in this study,

formal policies for communicating with parents are often outlined in handbooks given to parents during the school's open house night. The formal policy typically outlines the methods that parents should use to contact teachers (i.e., through their school's email and phone system – not social media) as well as a time range in which teachers have to respond to messages from parents (usually 24-48 hours).

5. Unions and school officials should continue to emphasize a climate of support among peers as well as with school management. Social networks at work (e.g., peers, supervisors) can provide support to reduce the effects of stressors.
6. Unions should consider developing and conducting training on work-related stress and recovery for teacher leaders or representatives.
7. School officials and unions should work on promoting the inclusion of work-related stress and recovery strategies in the context of teachers' continuous professional education.
8. School officials and unions should collaborate in ways to increase teacher involvement in school and classroom level decision making



REFERENCES

- European Trade Union Committee for Education (ETUCE) (2011). Teachers' work-related stress.
Retrieved from: <http://www.lizda.lv/content/files/TeachersStressEn.pdf>
- Kyriacou, C. (2000) *Stress-busting for Teachers*. Cheltenham: Stanley Thornes.