MEASURING TEACHER STRESS IN FRAGILE CONTEXTS

Y. Abisola Noah-Pinheiro
SIPA Columbia University
Education in Emergencies
Research & Analysis Paper
Spring 2017
1. INTRODUCTION

This paper examines the main questionnaires used by academic researchers studying teacher stress—an important determinant of job performance and student learning outcomes—for adaptability of use in fragile contexts. The questions the study seeks to answer are: What is a conceptual framework for understanding the sources of stress teachers in fragile settings experience, and which of the existing teacher stress questionnaires captures teachers’ risk for stress as laid out in the proposed framework? Using qualitative methods, I examine peer-reviewed literature along with relevant standards and guidance statements, organizational policies, and training materials. Because of the preponderance of higher-quality articles set in developed-country settings and the limited amount of the literature surrounding teacher stress in fragile settings, it is necessary to adopt a broad approach. Literature on related constructs, such as teacher motivation (and demotivation), teacher retention, teacher mental health, and teacher well-being in fragile and nonfragile settings, is also drawn upon for possible insight into teacher stress. Then, focusing on peer-reviewed literature on existing teacher stress instruments, I determine the stress domains and concepts represented in these tools and cross-map these to the elements identified for the conceptual framework.

As no existing questionnaire adequately captures all relevant sources of stress, this paper is the first of many steps in developing a teacher stress measurement tool that is tailored for use in emergency and recovery settings. The paper concludes with implications of the findings for further research on education in emergencies and for implementing organizations.

2. BACKGROUND AND TERMINOLOGY

Lazarus and Folkman (1984) offer a definition of stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being.” Kyriacou (1989) offers a similar definition: “Stress is generally recognized as being an unpleasant emotional state which occurs when there have been prolonged, increasing, or new pressures, which are significantly greater than coping resources” (see also Dunham 1992, qtd in Male & May 1997, p. 133).

Stress hinders optimal functioning among members of the “helping professions” (Maslach 1976, qtd in Cichon & Koff 1978, 1980), especially teachers (Chen & Miller 1997). While teacher stress has been extensively researched, especially in developed countries (Chen & Miller 1997), little has been done on nonmainstream teachers. As Weinstein and Trickett (2016, p. 25) note, there is a “limited body of research that focuses specifically on teachers outside of the mainstream setting,” and of these, Fimian (1984) points out that most effort is on teachers of special education,
of the learning disabled, of the emotionally disturbed, of the deaf, and of group-home residents. Even fewer studies address teachers in fragile settings.

During conflict, teachers’ roles—as counselors and mentors—magnify in importance. Yet, teachers may themselves be in the line of fire, intimidated, detained, imprisoned, or executed (UNICEF 2005). Teacher turnover can drastically increase in fragile conditions. In Syria, a reported 25% of teachers (952,500 teachers and more than 500 counselors) have abandoned their posts (UNICEF 2005); during the 1994 genocide in Rwanda, shockingly, 75% of teachers were eliminated or imprisoned (UNICEF 2005).

Post-conflict, the shortage of teachers can affect the job performance of those still teaching, as any inherent stresses at baseline (prior to conflict) are only exacerbated. Apart from the effects on remaining teachers of being short-staffed, educational programs and agencies can be significantly adversely affected in such situations, as the need for recruitment and training of new teaching staff intensifies.

Teachers in fragile settings, therefore, are dealing with sources of stress commonly found in developing countries, but these are superimposed on distress that they face directly as a result of the fragile contexts. It is surprising that few studies have been published on teacher stress, motivation, and well-being in fragile settings (Bennell 2004; Mulkeen 2010; Penson et al 2011, qtd in Ring & West 2015). As Ring and West (p. 107) put it, “much of the work that does exist on refugee teachers is anecdotal in nature.” They note Sesnan, Allemano, Ndugga, and Said’s (2013, p. 4) observations that “there are few studies on refugee teachers” and that the majority of “published studies and reports on education in emergencies deal with children.” These two facts have important consequences for education in fragile contexts, and this gap in the literature prompted the Inter-Agency Network for Education in Emergencies (INEE) to document the importance of well-being in Recommendation 1 of its publication on professional development for teachers in fragile settings (Burns & Lawrie 2015, p. 39): “Focus on teachers in fragile contexts—as professionals, learners and individuals who in many cases have suffered directly or indirectly from the conditions leading to fragility.” (emphasis added)

An examination of teacher stress becomes more crucial when one notes that quite apart from the psychological well-being of teachers in fragile settings themselves, there is some suggestion in the literature that psychosocial distress or poor mental health in teachers is a factor influencing children’s learning outcomes; however, this also has received relatively little attention. Given the known effect of teacher well-being on children’s learning outcomes in mainstream settings, there is an obvious need to more accurately determine and measure the sources of stress on teachers in fragile settings.
3. FINDINGS

3(A). SUMMARY OF LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The mainstream education literature identifies organizational characteristics (such as administrative bureaucracy, career advancement, class size, collegiality, degree of autonomy/participation in decision making, income, job demands, workload, resources, reward and recognition, role conflict and/or ambiguity, and student discipline and interaction) as key contributors to teacher stress (e.g. Chen & Miller 1997). This body of literature also suggests that apart from these “external” or environmental factors related to the nature of the teaching job, perceptions or experiences of stress also depend on internal factors, such as personality and temperament, attitudes, values, needs, and self-concept on the one hand, as well as coping responses, on the other. This is illustrated by the social-ecological model (Jorde-Bloom 1986, p. 170), as applied to teacher stress. Furthermore, links have been drawn between individual characteristics, such as age, gender, and marital status, and teacher stress (e.g., Chen & Miller, 1997).

Subject matter experts are of the opinion that teachers in crisis contexts face overlapping challenges, including “low salaries and/or incentive pay, oversized classrooms, limited resources, overage learners, language of instruction, curriculum, culturally and/or nationally diverse student body” (e.g., Mendenhall 2017) and “invisibility” with respect to decisions that impact the way they perform their duties (Burns and Lawrie 2015), all of which may influence student and teacher psychosocial well-being.

Although their work was not directly on teacher stress but on a related construct—demotivation (and motivation)—Ring and West’s (2015) literature review provides insights into potential stressors teachers may face in fragile settings. They found that seven key areas affected teacher retention: certification; incentives; management structures; professional development; recruitment, selection and deployment; status and social recognition; and the teaching environment. UNHCR, the United Nations High Commissioner for Refugees (undated-a) advises implementers to address the issue of compensation/incentives by finding “ways to support, motivate and reward teachers,” noting that “in many refugee settings, high rates of teacher turnover cause destabilization of the teacher supply and leakage of investment in teacher training. Low compensation or ‘incentive’ pay combined with the strenuous workload of teaching large groups of complex learners contribute to high teacher turnover.” UNHCR believes although improvements in incentives may be necessary, they are not sufficient to motivate teachers. Other means of motivation include enabling teachers to be active participants in decision making, improving their working conditions, and offering opportunities to pursue professional development and certification (UNHCR, undated-a).
The Inter-Agency Network on Education in Emergencies (INEE) also pointed out in its teacher professional development publication (Burns & Lawrie 2015) that it is important to “help teachers deal with crisis and conflict.” INEE notes that both student and teacher learning are hampered by personal distress. Possible mechanisms for assistance include providing support to teachers and their families in terms of basic needs (water, food, shelter, and safety); synchronizing teacher compensation among implementing organizations; imparting calming strategies and techniques to teachers for personal use or student instruction; assisting teachers with mental health challenges, including posttraumatic stress disorder; helping teacher victims (especially female) of sexual assault with psychotherapy; equipping teachers to support distressed students; and training teachers in conflict resolution.

The resulting conceptual framework for understanding teacher stress in crisis contexts, though constrained by the limited literature, is illustrated in Figure 1.

3(B). TEACHER STRESS QUESTIONNAIRES


Though some of these tools were subsequently modified (e.g., Fimian & Fostaneau 1990), many deficiencies have been noted. Some measures focus only on work conditions (e.g., Kyriacou & Sutcliffe 1978, 1979); others do not elicit the frequency with which teachers face distressing factors; and yet others lack evidence of construct validity or the degree to which a questionnaire measures what it is supposed to measure (Schonfeld 1992). Weinstein and Trickett (2016, p. 26) identify additional deficiencies in the literature: “narrow focus of content, levels of ecology not adequately represented, the confounding of stress with outcomes of stress, and issues of scale format” (scale format refers to the need to “differentiate the occurrence of events from their perceived stressfulness”).

These and other deficiencies must be considered when selecting teacher stress questionnaires for further examination. For the purposes of this paper, I have excluded the following:

- All specialized teacher stress instruments (e.g., Science Teacher Stress Inventory; Okebukola & Jegede 1992), except the English Language Learner Teacher Stress
FIGURE 1: CONCEPTUAL FRAMEWORK FOR UNDERSTANDING TEACHERS STRESS IN FRAGILE CONTEXTS

(Adapted from Jorde-Bloom 1986)
Measure (Weinstein & Trickett 2016), because this particular tool is applicable to teachers of refugee learners

- Purely inclusive education stress instruments, for example, the Inclusive Education Teacher Stress and Coping Questionnaire (Forlin 2001), which focuses mainly on students with disabilities
- The Index of Teaching Stress (Greene, Abidin, & Kmetz 1997), which measures stress in response to a particular student in class
- “Homegrown” measures in which researchers develop a questionnaire for a particular study but the “psychometric properties are not discussed by the authors and remain unknown” (Guglielmi & Tatrow 1998, p. 68)
- Measures for tertiary education teacher stress

The final four instruments considered for use in crisis contexts are the modified Teacher Occupational Stress Factor Questionnaire (TOSFQ; Clark 1980; Moracco, Danford, & D’Arienzo 1982), the modified Teaching Events Stress Inventory (TES; Cichon & Koff 1980; Livingston, Martray, & Adams 1983), the modified Teacher Stress Inventory (TSI; Fimian 1984; Fimian & Fostaneau 1990), and the English Language Learner Teacher Stress Measure (ETSM; Weinstein & Trickett 2016). These are examined in detail below.

MODIFIED TEACHER OCCUPATIONAL STRESS FACTOR QUESTIONNAIRE (TOSFQ; CLARK 1980; MORACCO, DANFORD & D’ARIENZO 1982)

This instrument (see Appendix I) was originally developed by Clark (1980) as a 30-item, 5-factor questionnaire (identified through factor analysis: Professional Inadequacy, Principal–Teacher Professional Relationships, Collegial Relationships, Group Instruction, and Job Overload) with a Likert-type response ranging from 1 (not stressful) to 5 (extremely stressful). Pilot testing was completed on 400 American teachers in Georgia and Alabama. Moracco, Danford, and D’Arienzo (1982) modified the factors/domains upon their testing of the tool in elementary, secondary, and special education schools in a mid-Atlantic state and settled on the following factors: Task Overload, Relationships with Teachers, Financial Security, Working with Students, and Administrative Support.

Importantly, this was purely a stress measurement tool and did not include any individual characteristics mediating stress, or any outcomes of stress, such as physical manifestations of stress. However, the authors in their work supplemented the modified TOSFQ with 10 items eliciting teacher belief systems, 10 items on tendency toward perfectionism and coping, and 21 items on physical and psychological symptoms, such as headache, high blood pressure, eating, depression, and anger.
MODIFIED TEACHING EVENTS STRESS INVENTORY (TES; CICHON & KOFF 1980; LIVINGSTON, MARTRAY, & ADAMS 1983)

The TES (Appendix II) was originally developed using a sample of elementary and secondary school teachers in Chicago and was designed as a 36-item questionnaire prompting the ranking of teaching-related events relative to a reference stressful event: the first week of school, which is arbitrarily assigned 500 points. This is the strength of the TES, in that the baseline stress event can be used to quantify the amount of stress provoked by any other itemized event. Although there is no actual “cap” on the figure the respondent can associate with a given stress event, an artificial cap of 1000 is imposed during analysis by the researchers such that any values above 1000 automatically get reassigned to 1000. Any events not experienced during the previous year are coded as 0. Original domains included Violence and Student Discipline, Management Tension, Doing a Good Job, and Pedagogical Functions. Factor analysis by Livingston, Martray, and Adams (1983) in their application of the tool to a sample of pre- and in-service teachers in elementary and secondary schools in rural, suburban, and urban Kentucky adjusted these themes into Personal/Professional Threat, Interpersonal Relationships, Racial Issues, Noncontact Teaching Tasks, and Change in Normal Routine, which seemed to be coherent and “logically sound” (p. 9) compared to the originally identified domains.

In addition, the measure lends itself to distinguishing between stressors outside of teachers’ control, for example, in the Personal/ Professional Threat domain (with items such as notification of unsatisfactory performance, involuntarily transferred, disagreement with supervisor, and denial of promotion or advancement), and stressors under direct control of individual teachers, for example, in the Interpersonal Relationships domain (including items on dealing with bilingual students, discussing children’s problems with their parents, and holding teacher–parent conferences). According to UNHCR (undated-b, p. 84), such a distinction is useful because “often teachers become too concerned with things they cannot change, instead of focusing on what they can. As a teacher, it is important to spend your time and energy on things you think you can influence. This will help you manage your stress in a healthy way.”

MODIFIED TEACHER STRESS INVENTORY (TSI; FIMIAN 1984; FIMIAN & FOSTANEAU 1990)

This is perhaps the most renowned teacher stress measure, having been used in more than 80 published articles (Weinstein & Trickett 2016). The TSI was originally a 49-item questionnaire with a 6-point Likert measure ranging from 0 (no stress, not noticeable) to 5 (major stress, extremely noticeable). It was designed to be completed and scored in 15
minutes or less, using a sample of mainstream and special needs public school teachers of grades kindergarten through secondary school in the United States.

The initial version (see Appendix III) covered the following six domains: Personal/Professional Stressors, Professional Distress, Discipline and Motivation, Emotional Manifestations, Biobehavioral Manifestations, and Physiological-Fatigue Manifestations. The original inventor coauthored a follow-up article in which the factors were expanded into 10—5 having to do with sources of stress and the other 5 related to manifestations of stress: Professional Investment, Time Management, Discipline and Motivation, Work-Related Stressors, Professional Distress, Behavioral Manifestations, Emotional Manifestations, Gastronomical Manifestations, Cardiovascular Manifestations, and Fatigue Manifestations.

Data obtained from a completed TSI do require comparison to a “norm,” which was developed by the authors using a quantitative survey on their aggregate sample. However, for greater sensitivity, comparisons may be made to norms developed for specific teacher subgroups, such as by setting (regular vs. special education teachers), gender (male vs. female teachers), and grade level (e.g., elementary vs. lower secondary school vs. upper secondary school), among other variables. However, its flexibility of use in the individual setting, with groups (e.g., workshops), and at the systems level (e.g., school level, state level, or beyond) is a strong feature.

ENGLISH LANGUAGE LEARNER TEACHER STRESS MEASURE (ETSM; WEINSTEIN & TRICKETT 2016)

ETSM is a 56-item (or, in the shorter version, 40-item) questionnaire containing four domains, Systemic Impacts, Social Support/Climate, Formal Job Characteristics, and Informal Job Duties, as well as an open response item where respondents can write in any other stressors not already included in the questionnaire (see Appendix IV). A strength is that for each item, the occurrence within 3 months of the survey and the degree of stressfulness (on a 5-point Likert scale) are elicited, capturing recent stress and severity of discomfort.

Weinstein and Trickett (2016) developed the ETSM to measure immigrant and refugee English language learner (ELL) teacher work stress in grades K–12 in US schools. Although such teachers are distinctly different from teachers in fragile settings, it can be argued that both experience similar stresses in many ways: in both ELL and fragile contexts, programs vary extensively by school; teachers have multiple work roles (counselor, mentor, etc.); teachers have to deal with constantly changing student needs; teachers have to adapt curricula to respond to “diverse student learning needs” as well as the heterogeneity in student backgrounds, academic abilities, culture, and language
within the same classroom; teachers are often “isolated from the mainstream”; there is often “increased need for parental involvement”; teachers often encounter “lack of well-developed curricular materials” (necessitating improvisation and “trial-and-error pedagogical processes”); and schools often rely on inexperienced teachers or those with limited training (Weinstein & Trickett 2016, p. 25), what the International Rescue Committee (IRC; undated) refers to as “alternatively qualified teachers.”

### 3(C). MAPPING OF CONCEPTUAL FRAMEWORK TO INSTRUMENTS

Although the different instruments were designed for use primarily in Western settings and, though with the possible exception of the ETSM, none was developed with teachers in fragile contexts (e.g., teachers of refugee or displaced learners) in mind, it was worth, as a starting point, comparing these existing teacher stress tools to the derived conceptual framework for adaptability for use in fragile settings.

The domains (as named by the developers) emerging from the analysis of the various teacher stress instruments are listed in Table 1.

#### TABLE 1: DOMAINS CAPTURED BY TEACHER STRESS INSTRUMENTS AS LABELED BY ORIGINAL DEVELOPERS/AUTHORS

<table>
<thead>
<tr>
<th>Modified TOSFQ</th>
<th>Modified TES</th>
<th>Modified TSI</th>
<th>ETSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships with teachers</td>
<td>Interpersonal relationships</td>
<td>Professional distress</td>
<td>Social support/climate</td>
</tr>
<tr>
<td>Task overload</td>
<td>Noncontact teaching tasks</td>
<td>Work-related stressors</td>
<td>Formal job characteristics</td>
</tr>
<tr>
<td>Administrative support</td>
<td>Change in normal routine</td>
<td>Professional investment</td>
<td>Systemic impacts</td>
</tr>
<tr>
<td>Working with students</td>
<td>Personal/professional threat</td>
<td>Discipline and motivation</td>
<td>Informal job duties</td>
</tr>
<tr>
<td>Financial security</td>
<td>Racial issues</td>
<td>Time management</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Manifestations- Behavioral, Cardiovascular, Fatigue, Emotional, and Gastronomical</td>
<td>-</td>
</tr>
</tbody>
</table>

Because there were few clear correlations in domain names and content from instrument to instrument, it was difficult to harmonize the domain labels used by the various authors in the different tools, into one coherent set. Instead, the actual items within the instruments were analyzed in relation to the stressors identified in the literature review. This cross-mapping is illustrated in Table 2.

Several trends are notable from the cross-mapping exercise. First, it is clear that all of the questionnaires were designed for use by teaching staff and not by administrators or other staff. However, among teachers, it appears that many of the measures can be used by both trainees and established professionals.
### TABLE 2: CROSS-MAPPING OF TEACHER STRESS–RELATED ELEMENTS IDENTIFIED IN THE LITERATURE REVIEW TO ITEMS IN TEACHER STRESS QUESTIONNAIRES

<table>
<thead>
<tr>
<th>Literature Review</th>
<th>Modified TOSFQ</th>
<th>Modified TES</th>
<th>Modified TSI</th>
<th>ETSM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional development, certification and career advancement</td>
<td>-</td>
<td>Attendance at in-service meetings</td>
<td>Lack opportunities for improvement in-service meetings</td>
<td>No availability of, or poor quality of, ongoing training and/or professional development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taking additional coursework for promotion</td>
<td>Lack promotion or advancement opportunities</td>
<td>Isolation from mainstream</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not progressing rapidly in job</td>
</tr>
<tr>
<td>Specific training in mental health/wellbeing-related strategies (for teachers and their students)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Dealing with mental health issues in class</td>
</tr>
<tr>
<td>Basic needs, incentives and compensation</td>
<td>Feeling my salary is not equal to my duties and responsibilities</td>
<td>-</td>
<td>Receive an inadequate salary</td>
<td>I spent time and money outside of the classroom organizing drives or collections for clothing, food, and other daily necessities for my students</td>
</tr>
<tr>
<td></td>
<td>Working for an inadequate salary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling my job does not provide the financial security I need</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role conflict and/or ambiguity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Spending time outside of class to develop acculturative lessons</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Taking class time to discuss acculturative issues</td>
</tr>
<tr>
<td>Teaching environment -resources</td>
<td></td>
<td>Lack of availability of books and supplies</td>
<td>-</td>
<td>Not having supplies necessary to do my job</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I used my own money to buy classroom supplies</td>
</tr>
<tr>
<td>-crowding and workload</td>
<td>Having to do school work at home to meet what is expected of me</td>
<td>Overcrowded classroom</td>
<td>Caseload/class is too big</td>
<td>Not having in-classroom volunteers or aides</td>
</tr>
<tr>
<td></td>
<td>Having insufficient opportunity for rest and preparation during the school day</td>
<td></td>
<td>Too much administrative paperwork</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having too little clerical help</td>
<td></td>
<td>Too much work to do</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling I never catch up with my work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Review</td>
<td>Modified TOSFQ</td>
<td>Modified TES</td>
<td>Modified TSI</td>
<td>ETSM</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>-diversity in student ability level or needs</td>
<td>Planning and organizing learning activities for wide ability ranges</td>
<td>Teaching students who are “below average” in achievement level</td>
<td></td>
<td>I had to spend time differentiating instruction for a class of students who have a diverse range of learning abilities, language proficiencies, and needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching physically or mentally handicapped children</td>
<td></td>
<td>Constantly changing student needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Students entering and leaving my classes throughout the school year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dealing with students whose primary language is not English</td>
<td></td>
<td>Dealing with inappropriate placement of students in my classes, regarding English Language Learner (ELL) level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dealing with student racial issues</td>
<td></td>
<td>I was not able to communicate with a student about a school or personal matter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lavatory facilities for teachers are not clean or comfortable</td>
<td></td>
<td>I oriented a newly arrived English Language Learner (ELL) student to school practices, including holding a pencil, opening a book, writing on paper, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not having a regularly assigned classroom space throughout the day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colleague assaulted in school</td>
<td></td>
<td>Teaching in an improvised or isolated space, such as hallways, stairwells, basements, or trailers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Threatened with personal injury</td>
<td></td>
<td>Explaining to students school safety concerns, such as around heating elements, fire alarms, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target of verbal abuse by student</td>
<td></td>
<td>I had to track down a student who was absent</td>
</tr>
<tr>
<td>Student discipline and interaction</td>
<td>Trying to motivate students who do not want to learn</td>
<td>Target of verbal abuse by student</td>
<td>Discipline problems in my classroom</td>
<td>I had to track down a student who was absent</td>
</tr>
<tr>
<td>Literature Review</td>
<td>Modified TOSFQ</td>
<td>Modified TES</td>
<td>Modified TSI</td>
<td>ETSM</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>Having students in my class/classes who talk constantly</td>
<td>Seeking principal’s interpretation in a discipline matter</td>
<td>Teaching students who should do better</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having to tell my students the same things over and over</td>
<td>Supervising student behavior outside the classroom outside of class responsibilities</td>
<td>Teaching students who are poorly motivated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling that a few difficult to discipline students take too much of my time away from other students</td>
<td></td>
<td>Inadequate or poorly defined discipline policies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling my students do not adequately respond to my teaching</td>
<td></td>
<td>Authority rejected by pupils/administrators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling I do not have adequate control of my students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum and time</td>
<td>Planning and organizing learning activities for wide ability ranges</td>
<td>Implementing [Board of Education] Curriculum goals</td>
<td>Little time to prepare</td>
<td>Not having adequate time for curriculum planning, paperwork, and meetings</td>
</tr>
<tr>
<td></td>
<td>Developing and completing daily lesson plans</td>
<td>School day pace is too fast</td>
<td>School day pace is too fast</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal priorities being shortchanged</td>
<td>Personal priorities being shortchanged</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management, administrative bureaucracy and autonomy/participation</td>
<td>-</td>
<td>Feeling there is a lack of administrative support in my school</td>
<td>Authority rejected by pupils/administrators</td>
<td>Administrators did not satisfactorily resolve a work problem that I brought to their attention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feeling my principal lacks insight into classroom problems</td>
<td>Lack control over decisions</td>
<td>I made a recommendation to the administration that they didn’t follow through on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feeling my opinions are not valued by my principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Review</td>
<td>Modified TOSFQ</td>
<td>Modified TES</td>
<td>Modified TSI</td>
<td>ETSM</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>--------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>Feeling my principal gives me too little authority to carry out the responsibilities assigned to me</td>
<td>Feeling I cannot tell my principal in an open way how I feel about many school related matters</td>
<td>Feeling my principal is too aloof and detached from the classroom</td>
<td>I made suggestions in recent meetings that were disregarded</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not having an on-site supervisor to consult with around work issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I was not invited to a meeting where decisions impacting my job [as an English Language Learner (ELL) teacher] were made</td>
</tr>
<tr>
<td>Recruitment, selection and deployment</td>
<td>Voluntarily transferred</td>
<td>Involuntarily transferred</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Collegiality</td>
<td>Working in a school where there is an atmosphere of conflict among teachers</td>
<td>Disagreement with another teacher</td>
<td>Dealing with staff racial issues</td>
<td>I had a conversation with a mainstream teacher who was not at all supportive of [English Language Learner (ELL) students]</td>
</tr>
<tr>
<td></td>
<td>Feeling some teachers in my school are incompetent</td>
<td></td>
<td></td>
<td>I had to explain to a mainstream teacher about the circumstances of [English Language Learner (ELL) students]</td>
</tr>
<tr>
<td></td>
<td>Feeling there is competition among teachers in my school rather than a team spirit of cooperation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling poor teacher/teacher relationships exist in my school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having a few teachers in my school who do not carry their share of the load</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling that cliques exist among teachers in my school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling that poor communication exists among teachers in my school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status and recognition</td>
<td>Feeling there is a lack of recognition for good teaching in my school</td>
<td>Need more status and respect</td>
<td>Lack recognition</td>
<td>-</td>
</tr>
<tr>
<td>Literature Review</td>
<td>Modified TOSFQ</td>
<td>Modified TES</td>
<td>Modified TSI</td>
<td>ETSM</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------------</td>
<td>------</td>
</tr>
<tr>
<td>Increased need for parental/community involvement</td>
<td>Feeling too many parents are indifferent about school problems&lt;br&gt;Feeling there is a lack of parental involvement in solving discipline problems</td>
<td>Talking to parents about their child’s problems&lt;br&gt;Teacher–parent conferences</td>
<td>-</td>
<td>I ran a program, or out-of-class activity, to help parents&lt;br&gt;I attended to activities outside of the classroom to deal with inappropriate student placements&lt;br&gt;Arranging for translation services/liaisons to facilitate communication with parents and/or family members&lt;br&gt;Scheduling and holding parent-teacher conferences&lt;br&gt;Getting parents to sign necessary school paperwork&lt;br&gt;Student missed class for family reasons</td>
</tr>
</tbody>
</table>

<p>| Internal factors |
|------------------|----------------|--------------|--------------|------|
| Attitudes and values | - | - | Not enough time to get things done | - |
| Psychological needs or outcomes | - | - | Personal opinions not sufficiently aired&lt;br&gt;Not emotionally/intellectually stimulated&lt;br&gt;Rush in my speech&lt;br&gt;Manifestations of stress - Behavioral&lt;br&gt;Using over-the-counter drugs&lt;br&gt;Using prescription drugs&lt;br&gt;Using alcohol&lt;br&gt;Calling in sick&lt;br&gt;Emotional&lt;br&gt;Feeling insecure | Dealing with mental health issues in class&lt;br&gt;Students pulled from the classroom for nonacademic matters (such as for mental health counseling, acculturation groups, health skills, etc.) |</p>
<table>
<thead>
<tr>
<th>Literature Review</th>
<th>Modified TOSFQ</th>
<th>Modified TES</th>
<th>Modified TSI</th>
<th>ETSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling vulnerable</td>
<td>Feeling unable to cope</td>
<td>Feeling depressed</td>
<td>Feeling anxious</td>
<td></td>
</tr>
<tr>
<td>Gastronomical</td>
<td>Stomach cramps</td>
<td>Stomach pains of extended duration</td>
<td>Stomach acid</td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>Feelings of increased blood pressure</td>
<td>Feelings of heart pounding or racing</td>
<td>Rapid/shallow breath</td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td>Sleeping more than usual</td>
<td>Procrastinating</td>
<td>Physical exhaustion</td>
<td></td>
</tr>
<tr>
<td>Physical weakness</td>
<td>Becoming fatigued in short time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality, temperament, and coping</td>
<td>-</td>
<td>-</td>
<td>Easily over commit myself</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Become impatient</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Do more than one thing at a time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Have little time to relax</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Think about unrelated matters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Feel uncomfortable wasting time</td>
<td></td>
</tr>
</tbody>
</table>
Second, in terms of geography, all were designed using samples of teachers in the United States, but perhaps only the TSI has been used in a wide variety of settings outside of the United States.

Third, although the measures as a whole, take into consideration teachers as professionals and as learners, they are inadequate in terms of recognizing teachers as individuals. The lack of crisis-cognizance is explained by the samples of teachers used in developing the questionnaires. Because of the lack of representation of fragile settings in the formulation of the tools, the questionnaires are suboptimal for use in the case of teachers in crisis contexts, who are, in many cases, directly or indirectly “survivors of war, natural disasters, conflict or physical or sexual violence” (Burns & Lawrie 2015, p. 52):

*I saw them kill a mother and her 3-year-old twins, and two others. My two brothers are missing, and three other members of my family. I don’t know where they are because we fled in all directions when the rebels attacked. So many people died that you don’t have enough paper to write down all their names.*


Fourth, in terms of actual measurement gaps, it is important as per INEE (Burns & Lawrie 2015) to measure the stress teachers face as individuals. Other than the TSI, none of the tools measures manifestations of stress, which are imperative, as these are inevitably experienced by teachers in fragile settings. According to INEE (Burns & Lawrie 2015, p. 52), “teachers who have experienced such events often face high rates of depression, anxiety and posttraumatic stress disorder (PTSD) and may need therapeutic and psychosocial supports so that they can begin the healing process and begin to help students heal.” The TSI does not fully measure symptoms of such conditions but only elicits information about somatized psychological distress. However, importantly, developers of both the TOSFQ and the ETSM have chosen to supplement their questionnaires with multiple items on, for example, signs and symptoms of burnout, to enhance predictive ability. In addition, the TOSFQ elicits information indicating teacher personality types. This supplementation of the existing teacher stress questionnaires in much of the teacher stress literature is indicative of the need to include in the stress questionnaires questions eliciting data on outcomes of stress (including physical, emotional, and behavioral outcomes) and elements of personality/coping styles.

Fifth, none of the questionnaires specifically asks teachers how school administrators or implementing organizations could help prevent or relieve stress, though some potential interventions can be deduced from the stressors identified.
The present study found no existing quantitative tool published in the peer-reviewed literature that adequately captured all sources or signs of stress teachers in fragile settings potentially experience. In particular, the experiences of teachers as individuals and survivors of crises are overlooked. Psychosocial and mental needs assessment tools, for instance those developed by HealthNet TPO (2009, Afghanistan), International Medical Corps (2011, Libya; 2012, Jordan), and United Nations Children’s Fund (UNICEF; 2007, Yemen) should be assessed for suitability to supplement teacher stress questionnaires. UNHCR’s teacher training module on teacher well-being also lists 16 relevant signs of stress in teachers (undated-b; p. 7). In acute large-scale crises, the Humanitarian Emergency Settings Perceived Needs Scale (HESPER; World Health Organization and King’s College London, 2011) tool, which elicits information on 26 types of psychosocial needs, may provide additional potential questions and methods for supplementing existing teacher stress questionnaires.

Though this study focuses on quantitative measures, the ideal tool will benefit from the use of mixed methods. Apart from use of a semi-structured questionnaire format in which respondents can add information in prose (as in the ETSM), there are a few ways in which qualitative and quantitative methods can be combined in such an endeavor. First, administration of the quantitative tool can be followed by key informant interviews with experts from INEE, UNICEF, UNHCR, and research institutions, including in-depth interviews and/or focus group discussions with teaching staff in crisis contexts. This sequence will help explain questionnaire-based findings. Second, and perhaps more useful, is that the development of the questionnaire can be preceded and informed by discussions and interviews with teachers and the other key informants mentioned. This will enhance the technical and cultural relevance of the questionnaire to the teaching staff group of interest while improving content validity. Lastly, and most robust, the first and second options can be merged such that qualitative methods inform the development of the questionnaire, the findings of which, after administration, can be explored, if needed, through a second round of qualitative enquiries (interviews and discussions).

For a fragile context-specific questionnaire to be useful, in addition, various forms of the validity and reliability of the tool should be assessed by piloting among small samples of teachers in refugee, conflict, disaster, and recovery settings, with the aim of carrying out an item inclusion/exclusion exercise. It will be important to include manifestations/outcomes of stress so that at-risk teachers can be referred to appropriate treatment/resources where available. Addition of these outcomes will also help with the actual predictive value of the stress measure itself. Moreover, note must be made of the frequency or timing of teachers’ experience of individual stressors, and whether or not acute (say, within the preceding 1-3 months) or chronic stress, or both, should be measured.

Most of the tools were designed for use with teaching staff only. Future research might explore tools for measuring administrator stress or test whether the same tools used for teachers can be adapted for use with administrators. Examinations of administrator stress
versus teacher stress versus student stress and how they relate (e.g., investigations of the degree of congruence of the three groups’ perceptions on the same events; Cichon & Koff 1978) might be useful.

Given the varying conditions in different fragile settings—disaster, conflict, complex emergencies—it is not clear if it will be possible to develop one tool that will be valid for use across all settings or if it is feasible to develop an instrument that can be contextualized to each setting (Cordingley et al 2007, qtd in Burns & Lawrie 2015). The first steps, however, would be to incorporate qualitative methods to further refine a teacher stress questionnaire that may be based on the type of cross-mapping completed in this paper, supplementing the items with humanitarian organization psychosocial/mental needs assessments tools. Until then, education in emergencies organizations may not benefit much from using any one of the existing questionnaires to assess the stress being experienced by their teaching staff.
5. REFERENCES


http://www.eldis.org/fulltext/dfidtea.pdf


https://eric.ed.gov/?id=ED410187


HealthNet TPO (2009) Psychosocial and mental health needs assessment in Uruzgan, Afghanistan. Amsterdam: HealthNet TPO. Available from wietse.tol@yale.edu


International Medical Corps (2011) IMC Libya Mental Health and Psychosocial Support Assessment Report. Available from iweissbecker@internationalmedicalcorps.org


## APPENDIX I: TEACHER OCCUPATIONAL STRESS FACTOR QUESTIONNAIRE (TOSFQ; CLARK, 1980, MODIFIED BY MORACCO, DANFORD, & D'ARIENZO, 1982)

### TASK OVERLOAD
- Having to do school work at home to meet what is expected of me
- Having insufficient opportunity for rest and preparation during the school day
- Planning and organizing learning activities for wide ability ranges
- Having too little clerical help
- Feeling I never catch up with my work

### RELATIONSHIPS WITH TEACHERS
- Working in a school where there is an atmosphere of conflict among teachers
- Feeling some teachers in my school are incompetent
- Feeling there is competition among teachers in my school rather than a team spirit of cooperation
- Feeling poor teacher/teacher relationships exist in my school
- Having a few teachers in my school who do not carry their share of the load
- Feeling that cliques exist among teachers in my school
- Feeling that poor communications exist among teachers in my school

### FINANCIAL SECURITY
- Feeling my salary is not equal to my duties and responsibilities
- Working for an inadequate salary
- Feeling my job does not provide the financial security I need

### WORKING WITH STUDENTS
- Trying to motivate students who do not want to learn
- Having students in my class/classes who talk constantly
- Feeling too many parents are indifferent about school problems
- Having to tell my students the same things over and over
- Feeling that a few difficult to discipline students take too much of my time away from other students
- Feeling my students do not adequately respond to my teaching
- Feeling I do not have adequate control of my students
- Feeling there is a lack of parental involvement in solving discipline problems

### ADMINISTRATIVE SUPPORT
- Feeling there is a lack of administrative support in my school
- Feeling my principal lacks insight into classroom problems
- Feeling my opinions are not valued by my principal
- Feeling my principal gives me too little authority to carry out the responsibilities assigned to me
- Feeling there is a lack of recognition for good teaching in my school
- Feeling I cannot tell my principal in an open way how I feel about many school related matters
- Feeling my principal is too aloof and detached from the classroom
### APPENDIX II: TEACHING EVENTS STRESS INVENTORY (TES; CICHON & KOFF, 1980, MODIFIED BY ALEXANDER, MARTRAY AND ADAMS 1983)

#### Abbreviated Stem Items

1. **PERSONAL/PROFESSIONAL THREAT**
   - Colleague assaulted in school
   - Notification of unsatisfactory performance
   - Strike preparation
   - Involuntarily transferred
   - Threatened with personal injury
   - Conference with principal/supervisor
   - Disagreement with supervisor
   - Denial of promotion or advancement
   - Target of verbal abuse by student
     - (Lavatory facilities for teachers are not clean or comfortable)

2. **INTERPERSONAL RELATIONSHIPS**
   - Managing disruptive students
   - Talking to parents about their child’s problems
   - Giving grades
   - Teaching students who are “below average” in achievement level
   - Teacher-parent conferences
   - Disagreement with another teacher
     - (Overcrowded classroom)
     - (Dealing with students whose primary language is not English)
     - (Teaching physically or mentally handicapped children)
     - (Seeking principal’s interpretation in a discipline matter)

3. **RACIAL ISSUES**
   - Dealing with community racial issues
   - Dealing with staff racial issues
   - Dealing with student racial issues

4. **NON-CONTACT TEACHING TASKS**
   - Developing and completing daily lesson plans
   - Evaluating student performance or giving grades
   - Maintaining student personnel and achievement student records
   - Research or training program from outside in the school
   - Attendance at in-service meetings
   - Supervising student behavior outside the classroom outside of class responsibilities
     - (Implementing Board of Education Curriculum goals)
     - (Taking additional coursework for promotion)

5. **CHANGE IN NORMAL ROUTINE**
   - First week of school
   - Reorganization of classes or program
   - Changes in duties/responsibilities
   - Voluntarily transferred
     - (Lack of availability of books and supplies)
APPENDIX III: TEACHER STRESS INVENTORY (TSI; FIMIAN 1984, MODIFIED BY FIMIAN & FASTENAU 1990)

Instructions: Next, the following are a number of teacher concerns. Please identify those factors which cause you stress in your present position. Read each statement carefully and decide if you ever feel this way about your job. Then indicate how strong the feeling is when you experience it by circling the appropriate rating on the 5-point scale.
If you have not experienced this feeling, or the item is inappropriate for your position, circle number 1 (no strength, not noticeable)

Response Scale:
STRENGTH SCALE
1 = no strength, not noticeable to 5 = major strength, extremely noticeable

Abbreviated Stem Items

Sources of Stress
PROFESSIONAL INVESTMENT
Personal opinions not sufficiently aired
Lack control over decisions
Not emotionally/intellectually stimulated

TIME MANAGEMENT
Easily over commit myself
Become impatient
Do more than one thing at a time
Have little time to relax
Think about unrelated matters
Feel uncomfortable wasting time
Not enough time to get things done
Rush in my speech

DISCIPLINE AND MOTIVATION
Discipline problems in my classroom
Having to monitor pupil behavior
Teaching students who should do better
Teaching students who are poorly motivated
Inadequate or poorly defined discipline policies
Authority rejected by pupils/ administrators

WORK-RELATED STRESSORS
Little time to prepare
Too much work to do
School day pace is too fast
Caseload/class is too big
Personal priorities being shortchanged
Too much administrative paperwork
PROFESSIONAL DISTRESS
Lack promotion or advancement opportunities
Not progressing rapidly in job
Need more status and respect
Receive an inadequate salary
Lack recognition

*Manifestations of Stress*

**BEHAVIORAL MANIFESTATIONS**
Using over-the-counter drugs
Using prescription drugs
Using alcohol
Calling in sick

**EMOTIONAL MANIFESTATIONS**
Feeling insecure
Feeling vulnerable
Feeling unable to cope
Feeling depressed
Feeling anxious

**GASTRONOMICAL MANIFESTATIONS**
Stomach cramps
Stomach pains of extended duration
Stomach acid

**CARDIOVASCULAR MANIFESTATIONS**
Feelings of increased blood pressure
Feelings of heart pounding or racing
Rapid/shallow breath

**FATIGUE MANIFESTATIONS**
Sleeping more than usual
Procrastinating
Physical exhaustion
Physical weakness
Becoming fatigued in short time
APPENDIX IV: ENGLISH LANGUAGE LEARNER TEACHER STRESS MEASURE (ETSM; WEINSTEIN & TRICKETT 2016)

Instructions: Please think about your experiences within the last 3 months, then respond to the following questions.

Response Scale:
DID THIS HAPPEN IN THE LAST THREE MONTHS?
0 = yes; 1 = no
IF YES, HOW STRESSFUL WAS IT?
1 = not at all stressful, 2 = not very stressful, 3 = mildly stressful, 4 = fairly stressful, 5 = extremely stressful

SYSTEMIC IMPACTS
1. Preparing English Language Learner (ELL) students for federal and state (i.e., NCLB) mandated testing
2. Preparing English Language Learner (ELL) students for mandatory language testing (i.e., ACCESS)
3. Integrating mainstream content standards (or common core material) into my teaching
4. Not having information about my job next year
5. Spending time meeting the targeted Annual Yearly Progress (AYP or smart goals) of my students
6. No availability of, or poor quality of, ongoing training and/or professional development
7. I had to deal with student reactions to mandated testing
8. I had to supervise/manage the home language survey for newly registering students for the Central Office

SOCIAL SUPPORT/CLIMATE
9. I made a recommendation to the administration that they didn’t follow through on
10. I made suggestions in recent meetings that were disregarded
11. I had trouble finding other English Language Learner (ELL) teachers to talk to about a school-related issue
12. I had a conversation with a mainstream teacher who was not at all supportive of English Language Learner (ELL) students
13. I had to explain to a mainstream teacher about the circumstances of English Language Learner (ELL) students
14. Seeing English Language Learner (ELL) students treated in negative ways by school adults
15. Seeing English Language Learner (ELL) students treated in negative ways by other students
16. Not having an on-site supervisor to consult with around work issues

FORMAL JOB CHARACTERISTICS
17. Students entering and leaving my classes throughout the school year
18. Dealing with inappropriate placement of students in my classes, regarding English Language Learner (ELL) level
19. Dealing with students with learning disabilities that are placed in my English Language Learner (ELL) classes
20. Teaching in an improvised or isolated space, such as hallways, stairwells, basements, or trailers
21. Not having in-classroom volunteers or aides
22. I was not invited to a meeting where decisions impacting my job as an English Language Learner (ELL) teacher were made
23. I had to spend time differentiating instruction for a class of students who have a diverse range of learning abilities, language proficiencies, and needs.
24. Doing administrative paperwork that mainstream teachers didn’t have to do.
25. I had to track down a student who was absent.
26. I oriented a newly arrived English Language Learner (ELL) student to school practices, including holding a pencil, opening a book, writing on paper, etc.

INFORMAL JOB DUTIES
27. Students pulled from the classroom for non-academic matters (such as for mental health counseling, acculturation groups, health skills, etc.)
28. I spent time and money outside of the classroom organizing drives or collections for clothing, food, and other daily necessities for my students.
29. I ran a program, or out-of-class activity, to help parents.
30. I attended to activities outside of the classroom to deal with inappropriate student placements.
31. Arranging for translation services/liaisons to facilitate communication with parents and/or family members.
32. Getting parents to sign necessary school paperwork.
33. Providing professional development for mainstream staff.
34. I was asked by a mainstream teacher to discuss an English Language Learner (ELL) student issue with them.
35. Advocating for my students outside of the classroom with other school personnel.
36. Spending time outside of class to develop acculturative lessons (teaching hygiene, about the U.S., etc.)
37. Taking class time to discuss acculturative issues (teaching hygiene, about the U.S., etc.)
38. Dealing with mental health issues in class.
39. I oriented a newly arrived English Language Learner (ELL) student to school policies and practices.
40. Explaining to students classroom expectations (leaving seat, raising hand, going to the bathroom, etc.)

OTHER
41. Other:
   Please provide information about any additional things that may have happened in your work as an ELL teacher that you experienced as stressful. Please pay particular attention to anything that this survey might have missed. Your feedback here is extremely valuable!