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Language teachers’ coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions

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Abstract

Teaching often is listed as one of the most stressful professions and being a language teacher triggers its own unique challenges. Responses to the Covid-19 pandemic have created a long list of new stressors for teachers to deal with, including problems caused by the emergency conversion to online language teaching. This article examines the stress and coping responses of an international sample of over 600 language teachers who responded to an online survey in April 2020. The survey measured stressors and 14 coping strategies grouped into two types, approach and avoidant. Substantial levels of stress were reported by teachers. Correlations show that positive psychological outcomes (wellbeing, health, happiness, resilience, and growth during trauma) correlated positively with approach coping and negatively with avoidant coping. Avoidant coping, however, consistently correlated (rs between 0.42 and 0.54) only with the negative outcomes (stress, anxiety, anger, sadness, and loneliness). In addition, ANOVA showed that although approach coping was consistently used across stress groups, avoidant coping increased as stress increased suggesting that there may be a cost to using avoidant coping strategies. Stepwise regression analyses using the 14 specific coping strategies showed a complex pattern of coping. Suggestions for avoiding avoidance coping strategies are offered.

1. Introduction

The typical days for language teachers around the world were stressful enough, given their typically heavy workloads, time pressures, and difficulties juggling roles (MacIntyre et al., 2019). The sources of teacher stress have multiplied with the advent of Covid-19. Workloads that were once perceived as substantial have been complicated by a rapid conversion to online delivery for which many language teachers had not been prepared but whose effects seem likely to last for years to come. Balancing personal and professional roles is a challenge for many teachers, but online delivery of courses with work-at-home protocols and ubiquitous online work-related activity creates a lack of physical, temporal and/or psychological boundaries between school and home. In many cases, teachers have significant others sharing the same space and/or have their own children who also need their attention. In particular, the nature of the global pandemic brings a particular set of Covid-19 challenges.
difficulties to the mix: health concerns for oneself and loved ones, social and physical distancing, travel restrictions, closed borders, shortages of daily necessities, restricted services, and uncertainty as to when life will return to ‘normal.’ Faith has been shaken in the certainty of what ‘normal’ even means now or what it will be in the future; the long-term consequences for language teachers and teaching are unknown. Even as we write this manuscript in late April 2020, these challenges persist for many across the globe and the passing of time is itself becoming a stressor that challenges people’s ability to persist under conditions described as trauma in the making (Salas, 2020). There is no denying that life with Covid-19 has suddenly and unavoidably become more difficult and complicated for everyone, including language teachers. How are language teachers coping in the midst of the crisis as much of the world is locked down and education systems are disrupted?

2. Literature review

2.1. Stress

Stress, a much-studied concept in psychology, generally refers to a psychological reaction to environmental conditions (stressors) that produce a variety of effects including physical arousal and threats to wellbeing (Lazarus, 1996; 2006). The stress-appraisal process includes identifying what is at stake and the resources available to deal with the situation, so-called primary and secondary appraisals respectively, in an iterative process that most often generates behavioral efforts to cope (Lazarus & Folkman, 1984). Coping is the process of responding to a stressor using one or more available techniques or strategies. A teacher’s use of coping responses to stressors is an important determinant of their psychological adjustment and wellbeing (Gustems-Carnicer & Calderón, 2013; Pyhältö, Pietarinen, Haverinen, Tikkanen, & Soini, 2020; Talbot & Mercer, 2019). The degree to which a teacher experiences stress in a situation hinges on a variety of factors, including: appraisal of demands and the teacher's strategies to manage them; expectations of possible upcoming demands and the teacher's readiness to handle them; and the teacher's degree of skill preparedness and practice in handling demands effectively (Bottiani, Duran, Pas, & Bradshaw, 2019; Dunham, 1992). Herman, Reinke, & Eddy (2020) proposed a “3C Theory of Teacher Stress” that describes three interconnected pathways leading to teacher stress, integrating individual differences in teachers’ (1) coping, (2) competence in executing practices that effectively manage the teaching-learning process, and the systemic (3) context in which teaching occurs, including policies, practices, and administrative support. Teacher stressors extend well beyond the teaching context.

Response to the Covid-19 pandemic crisis has produced no shortage of stressors as it is most definitely a period of heightened psychological stress. Language teachers, their learners, and parents around the globe are having to cope with the astonishing chain of events brought on by Covid-19 as schools close and officials direct diverse levels of shelter-in-place orders, from social distancing to strict quarantines, in order to cope with the global pandemic. For many language teachers, this has required switching to teaching under unfamiliar and difficult circumstances with little warning and preparation, and barely, if any, training. There has been an expectation that teachers will simply carry on and do their best by adapting, adjusting and continuing to aim for effective communicative language teaching using a range of online resources. How realistic it is for educators to meet these demands has not been at the forefront of most (any) policy decisions, and the stress being produced is something of an afterthought — if it is considered at all. In addition to a long list of practical pedagogical stressors, educators are also contending with the strains of the pandemic itself, from health concerns for self and others, changes brought on by working from home, threats to the current job and future career, new family and domestic responsibilities, and often being confined to their home.

2.2. Stress: teacher + language + pandemic

As of the end of March 2020, the global pandemic already had affected an estimated 1.54 billion children and youth throughout 185 countries in Asia, Europe, the Middle East, North America, and South America through school and university closures (Schleicher, 2020). In many parts of the world, the education systems have responded by stopping face-to-face in-classroom instruction and making a rapid conversion to online or remote teaching. In many cases, teachers were given mere days or even hours to convert face-to-face classes to online teaching via synchronous and/or asynchronous methods, often in spite of challenges concerning the availability of necessary digital devices, prior training in online teaching techniques, and/or effective online learning support platforms. In most cases, teachers have not been trained in the necessary technical and pedagogical skills to integrate digital technology instruction (Schleicher, 2020). According to Tuominen and Leponiemi (2020, p. 7), “The ongoing Covid-19 crisis has been, and will continue to be, both a massive challenge and a learning experience for the global education community. Practically no one saw (or wanted to believe) something like this coming.” The situation has been described as ‘emergency online homeschooling’ (Guzdial, 2020; Lehmann, 2020; Milligan, 2020).

Even pre-pandemic, teaching was often listed as one of the most stressful professions (Johnson et al., 2005). Some of the ‘normal’ (i.e., pre-pandemic) stressors that teachers in general (not just language teachers) suffer from include pressure inflicted by heavy workloads, time constraints, unbalanced work-life integration, limited autonomy, excessive administrative obligations, strained relationships with colleagues and school leaders, role conflict/ambiguity, managing innovation and change, emotional labor, dread over losing control of the class, fear of evaluation, and low professional self-esteem, among others (Mercer & Gregersen, 2020). Being a language teacher triggers its own unique challenges resulting from the specificity and the emotional character of foreign-language teaching: self-doubts about one’s own language ability; coping with the...
emotional anxieties of learners; heterogeneous proficiency in learner groups; threats to sense of self and identity; energy-intensive teaching methodologies; intercultural components to teaching; and precarious working conditions (Borg, 2006; Cosgrove, 2001; Gkonou & Miller, 2017; Ckonou, Dewaele, & King, 2020; Horwitz, 1996; Mercer, Oberdorfer, & Saleem, 2016; Wieczorek, 2016).

Few if any of these stressors has disappeared; they still exist in combination with the litany of new unique stressors emerging from the global pandemic and the reaction of education systems to it. Petrie (2020) identifies additional stressors for educators that include among others: 1) Teachers without resources to discuss pandemics and uncertainties with their learners and who are scrambling to do digital without much support and training; 2) Learners who are highly anxious and lonely, unable to focus and worried about having an unnatural closure to the academic year; 3) Parents who are overwhelmed and unprepared to coach their kids about digital tools and innovative educational practices, also trying to balance work and homeschooling; and 4) The relationships among all these players, including the maintenance of positive student-teacher-parent rapport and encouraging collaborative learning and socialization that is so challenging online. Considering the myriad challenges and stressors, how are language teachers coping and are there any reasons for positivity among their experiences?

2.3. Coping

In their influential 'transactional model' of stress and behavioral self-regulation, Lazarus and Folkman (1984) divided coping strategies into emotion-focused and problem-focused strategies. Whereas problem-focused coping is aimed at solving the perceived problem or doing something to alter the source of stress, emotion-focused coping is aimed at reducing or managing the emotional distress that is associated with or triggered by the situation (Lazarus & Folkman, 1984). Early research suggested that problem-focused was preferable to emotion-focused coping for long-term, healthier psychological functioning, though it is now recognized that most stressors elicit both types of coping (Boniwell & Tunariu, 2019). Carver and Scheier (1998) argued that the distinction between problem-focused and emotion-focused coping was too simplistic. They developed a multidimensional model of coping and an accompanying measurement instrument, the COPE Inventory (Coping Orientation to Problems Experienced) with 60 items (Carver, Scheier, & Weintraub, 1989). The COPE was the predecessor to the Brief-COPE (Carver, 1997), a streamlined version designed for ease of administration with reduced redundancy among items. The Brief-COPE includes 28 self-report items divided into 14 subscales of two items each, designed to measure potentially effective and ineffective ways to cope with a stressful life event. Although Carver does not recommend viewing the Brief-COPE as a single scale to measure a general construct, it is possible to group coping strategies into larger coping styles (see Table 1). Approach strategies actively work to change the stressor or accept its presence in one’s life; avoidant coping strategies tend toward more dysfunctional responses such as denial, distraction, or substance use. Carver et al. (1989) emphasized that it is important not to pre-ordain certain strategies as better than others. Rather, it is advisable to consider the fit between an individual’s coping strategies and the constraints of a given situation. Different types of events require different responses as they evolve over time, and there may be moments when denial, distraction, venting, and so on are the best available responses as a short-term strategy.

2.4. Correlates of coping among teachers

A concern throughout the literature on stress and coping is how relatively successful different coping strategies are in producing more positive outcomes and leading to fewer negative outcomes. When coping strategies fail, individuals may find themselves feeling stress, anxiety, and a suite of negative emotions. Among teachers, burnout has been a prominent concern

| Table 1 Subscales of the Brief-COPE Scale (Carver, 1997). |
|--------------------------------|
| **Approach Strategies**       |
| 1. Acceptance: Acknowledging the reality of what happened and learning to live with it |
| 2. Emotional Support: Obtaining emotional support and seeking comfort and understanding |
| 3. Positive Reframing: Seeing the situation from a different more affirming light; seeking something good in it |
| 4. Active Coping: Concentrating efforts on doing something about the situation and taking action to try to make it better |
| 5. Instrumental Support: Seeking help and advice from others. Trying to get advice or help from others about what to do |
| 6. Planning: Devising a strategy about what to do. Thinking hard about the steps to take |
| **Avoidant Strategies**       |
| 7. Behavioral Disengagement: Giving up trying to deal with it or abandoning attempts to cope |
| 8. Denial: Saying to oneself ‘this is not real’. Refusing to believe it happened |
| 9. Self-Distraction: Turning to work or other activities to take mind off things. Doing something to think about it less |
| 10. Self-Blaming: Criticizing oneself or censuring oneself for things that happened |
| 11. Substance Use: Using alcohol or other drugs to feel better |
| 12. Venting: Verbalizing unpleasant feelings to let them escape, or generally expressing negative feelings |
| **Neither Approach nor Avoidant Strategies** |
| 13. Humor: Making jokes about it/Making fun of the situation |
| 14. Religion: Finding comfort in spiritual beliefs/Praying or meditating |
perceived growth during the current trauma, we include a measure of post-traumatic growth (PTG, Taku, Cann, Calhoun, 2004). Among negative outcomes included in the present study are ratings of increased stress, anxiety, anger, sadness, and loneliness. The burgeoning literature on positive psychology in SLA (MacIntyre et al., 2019) makes it clear that it is essential to include measures of both positive and negative outcomes because “wellbeing is not simply the absence of negative function, but rather is something more. That is, a lack of negative affect, depression, loneliness, insecurity, and illness is not the same as the presence of positive affect, happiness, social connection, trust, and wellness” (Butler & Kern, 2016, p. 2).

To assess the psychological health of teachers enduring the stress of the pandemic, perhaps the most obvious concepts to assess are happiness and wellbeing. Unfortunately, happiness is one of the most troublesome and difficult-to Define concepts in all of psychology and philosophy (Lazarus, 2003). Empirical work in this domain has been aided by the development of the PERMA framework to specify a multidimensional approach to defining happiness (Seligman, 2011). PERMA is a five-pronged model of psychological wellbeing and happiness that characterizes a sense of fulfillment, happiness, and meaning. It can be measured using the 23-item PERMA Profiler (Butler & Kern, 2016), which uses three items to assess each of the five PERMA dimensions. Along with core items, the PERMA Profiler provides additional measures of key negative emotions and general health originally designated as ‘filler items’ but which provide useful information on their own (discussed below). In the present study, the 15 items of PERMA will be used as a composite index of teacher happiness and wellbeing.

An additional measure wellbeing that has been used more widely in the literature than PERMA and for a longer period of time is the WHO-5 Index of wellbeing (World Health Organization WHO, 1998). Used in over 200 empirical studies WHO-5 is among the most often used questionnaires for assessing psychological wellbeing; it has been translated into 30 languages (Topp, Østergaard, Søndergaard, & Bech, 2015). Low scores on the WHO-5 Index of wellbeing can be used to screen for depression and the versatile scale has been used as an outcome measure for intervention studies.

A concept related to wellbeing is psychological resilience, which reflects the capacity to withstand and recover from experiences of psychological adversity or maintain effective functioning despite adverse circumstances (Masten, 2001). In essence, resilience is the ability to withstand stress or bounce back from a traumatic event to recover previous levels of functioning, along multiple pathways (Bonanno, 2004).

Beyond the notion of maintenance or recovery of previous function implied by resilience is the possibility of development, enhancement, and growth after trauma (Tedeschi & Calhoun, 2004). Therefore, the final measure of positive functioning that we will use is derived from the literature on post-traumatic stress disorder (PTSD). Since its introduction as a diagnosis in 1980, PTSD has become a prominent public concern connected to traumatic events. However, reactions of individuals to trauma vary considerably and it has been argued that, in the long-term, people may be more likely to react to trauma with a sense of growth than with PTSD (Rendon, 2016; Seligman, 2011). Therefore, to assess the possibility of perceived growth during the current trauma, we include a measure of post-traumatic growth (PTG, Taku, Cann, Calhoun, & Tedeschi, 2008). PTG includes developing enhanced appreciation of life, relationships with others, new possibilities in life, personal strength, and spiritual change (Tedeschi & Calhoun, 1996). However, given that as we conduct the research, the pandemic is very much a current issue and we are not yet entering a ‘post’-pandemic phase, we had to modify the measure to reflect the perception of growth during trauma. This study will be the first to use this revised measure to evaluate whether, while still in the midst of the pandemic, teachers perceive any sense of growth or positive change as a result of their experiences thus far.

In addition to measures of stress, health, and wellbeing, the potential negative correlates of coping include levels anxiety, anger, sadness, and loneliness. Anxiety has been a prominent concern in second-language acquisition (SLA) research, the most frequently studied emotion in our field (Dewaele & MacIntyre, 2016), but has been considered primarily among learners – not teachers. Teacher anxiety is becoming a more pressing concern given the difficulties they face (Hiver, 2016). The Covid-19 pandemic considerably elevates the concern for teachers’ anxiety as they find themselves confronted with demanding new teaching methods, extraordinary contexts, and unfamiliar media. Anxiety is a fear-related, full-body reaction to an amorphous threat (as opposed to a specific, tangible threat such as a snake or fire) that includes physiological effects, unpleasant arousal, cognitive distortions, and avoidance behaviors (Reeve, 2015). Another potentially maladaptive emotion is anger, which is one of the most intense and potentially dangerous emotions given that it is associated with a strong urge to act (Harmon-Jones & Harmon-Jones, 2016). Anger has been associated with lower levels of wellbeing, anxiety disorders, and PTSD (Barrett, Mills, & Teesson, 2013). Sadness is a more passive type of emotion related to feelings of loss and although it is important to recognize a full range of emotions, in measures of subjective wellbeing, it is the perceived balance between positive and negative emotions that can generate a sense of hedonic wellbeing (Schimmack, 2008). Finally, loneliness is an emotion most often expressed when access to social settings is denied, where one is feeling socially emotionally isolated.
Given social restrictions, changes in workplaces, and disruption of interpersonal connections during the pandemic, it is likely that there is an increased sense of loneliness (Barreto et al., 2020).

In theory, all emotions, even unwelcome ones, have adaptive attributes (Reeve, 2015) and under certain conditions each of the emotions studied here – anxiety, anger, sadness, and loneliness – has a role to play in successful functioning: anxiety alerts us to potential dangers, sadness is associated with preventing loss, loneliness promotes social interaction by motivating us to regain connections with other people, and anger is useful in removing obstacles thereby restoring pursuit of an important goal. However, each of these emotions, if sustained over a long period of time, can be problematic and maladaptive in larger doses.

2.5. The present study

Considering the unique stressors of the Covid-19 pandemic and the unprecedented pedagogical responses around the world, the present study addresses questions of language teacher coping strategies and their correlates. Specifically, the results of the study will address the following research questions:

RQ1: To what degree do language teachers experience specific stressors?
RQ2: What coping strategies do language teachers use most often?
RQ3: Do total scores for approach and avoidant coping correlate with positive and negative outcomes?
RQ4: How strongly do each of the 14 specific strategies of the Brief-COPE inventory contribute to predicting positive and negative outcome variables?

3. Method

3.1. Participants

A total of 634 language teachers participated in the study. The use of an online survey tool with snowball sampling produced a large data set but it cannot be considered random or representative and we have no way to know what the response rate was or how many people saw the invitation but chose not to respond. A sampling frame that captures the population of teachers worldwide, which would allow for random sampling, is likely impossible to produce in practice and representativeness cannot be assessed.

Almost 75% were teachers of English, and approximately 80% were female. The age range of the sample is presented in Table 2.

Approximately half of the respondents came from Europe (51.4%) and almost a quarter came from North America (23.5%), with smaller percentages coming from Asia (8.8%), South America (6.9%), and the Middle East (5.2%), and smaller numbers from elsewhere in the world. Overall, the sample had considerable teaching experience: over 50% of respondents had been teaching for 15 years or more and only 3% were in their first year of teaching (see Table 3).

There was a wide variety of institutions and levels of instruction represented in the sample, including post-secondary (n = 242), secondary (n = 150) and primary institutions (n = 58), with many teachers affiliated with more than one educational context. Respondents indicated they came from private (n = 172), public (n = 176), and 147 other contexts, with the rest indicating a mix of contexts. Almost everyone – approximately 95% of respondents (n = 597) – had transitioned to online teaching as part of institutional responses to the Covid-19 virus pandemic. Most respondents, however, had very little time to prepare for the transition to online teaching: approximately three-quarters of the sample had less than a week to convert their courses (see Table 4).

3.2. Materials

The materials used to assess positive and negative outcomes are short forms of longer instruments, designed to be brief measures, or single-item indicators. The choice to use briefer materials results from a trade-off between depth of information

| Age Group (years) | Frequency (n) | Percent (%) |
|-------------------|---------------|-------------|
| <22               | 25            | 3.943       |
| 22–32             | 121           | 19.085      |
| 33–43             | 195           | 30.757      |
| 44–54             | 200           | 31.546      |
| 55–65             | 84            | 13.249      |
| >65               | 7             | 1.104       |
| Data missing      | 2             | 0.315       |
| Total             | 634           | 100.000     |
and the breadth of topics that can be covered. The materials for the study included the following scales administered as part of an online survey:

1. **Brief-COPE**: Carver’s (1997) 28-item index of coping strategies was used to create 14 subscales (two items per subscale). Each subscale was not intended to be used as a single index of coping, and we used them both individually and in two clusters: (1) Avoidant Coping (Cronbach’s $\alpha = 0.73$), characterized by the subscales of denial, substance use, venting, behavioral disengagement, self-distraction and self-blame, and (2) Approach Coping (Cronbach’s $\alpha = 0.82$), characterized by the subscales of active coping, positive reframing, planning, acceptance, seeking emotional support, and seeking informational support.

2. **Stress Index (new)**: A 15-item stress index was created for the present study, including items related to travel, health, relationships, workload, and work-life balance. Cronbach’s $\alpha = 0.89$.

3. **PERMA Profiler** (Butler & Kern, 2016): A 15-item index of eudaimonic happiness and positive wellbeing was used. Five subscales were included: positive emotion, engagement, relationships, meaning, and accomplishment. Cronbach’s $\alpha = 0.92$.

4. **WHO-5 Well-being Index** (Topp et al., 2015): The World Health Organization’s five-item index of wellbeing was used. Items included feeling cheerful, active, refreshed, and interested. Cronbach’s $\alpha = 0.91$.

5. **Resilience** (Amtmann et al., 2020): An eight-item index of resilience was included with items reflecting keeping calm, keeping going, bouncing back, and doing important things. Cronbach’s $\alpha = 0.89$.

6. **Growth Through Trauma (new)**: This 10-item scale was an adaptation of a measure of PTG. The revised measure, based on Taku, Cann, Calhoun, & Tedeschi (2008), was created to capture the feeling of growing during trauma by changing the verbs in the items from past to present tense. Items were worded to capture changing priorities, new directions, and a sense of feeling stronger than before. Cronbach’s $\alpha = 0.92$.

7. **State Anxiety** (Marteau & Bekker, 1992): A six-item short form of Spielberger’s state anxiety scale was used, with three positive and three negative items (reverse scored). Higher total scores indicated higher anxiety. Instructions for the scale were slightly revised to focus on feelings during the past 24 h. Cronbach’s $\alpha = 0.85$.

8. **Health Index** (Butler & Kern, 2016): A four-item index of perceived overall health was used based on items in the PERMA Profiler. The items asked about perceptions of general health, one’s health relative to other people, and satisfaction with both general and physical health. Cronbach’s $\alpha = 0.90$.

9. **Single-Item Indicators of Negative Emotions**: Three negative emotions were taken from the PERMA Profiler: angry, sad, and lonely. Cronbach’s $\alpha$ is not calculated for the single-item indicators.

### 3.3. Procedure

The survey was administered via Google Docs between April 5 and April 19, 2020. The survey was shared via social media networks and through personal email contacts to generate a snowball sample. Respondents gave informed consent before participating and were advised on the consent page not to take part, or quit at any time, if they felt especially vulnerable or uncomfortable talking about their wellbeing because there was a concern that reflecting on wellbeing could act as negative trigger for those feeling fragile at the time. After 14 days in the field, the web survey received 634 responses.
4. Results and discussion

4.1. Stressors

The first research question (RQ1) asked ‘what do teachers find most stressful?’ Fig. 1 shows the mean ratings of the 15 stressors listed in the survey, all of which were rated above the mid-point of the stress scale (2 out of 4). The most stressful experience reported by teachers was workload followed by family health, which were rated as significantly more stressful than all other items. Loss of control over work also rated above 3 out of 4 (M = 3.07). Other teaching-related stressors included blurred lines between home and work, loss of control over personal decisions, the stress of online teaching, irregular hours, and finances, all of which were rated above 2.5 out of 4. A planned comparison revealed significantly higher stress over family health (M = 3.37, sd = 1.18) than the teacher’s own health (M = 2.49, sd = 1.17, t[628] = 20.8, p < .001, ηp² = 0.41). This result suggests that teachers often may be ‘sandwiched’ between caring for (or caring about) both older and younger family members. Teachers are more worried about the health of others than they are about their own, a realistic fear heightened by the disproportionate danger Covid-19 poses for older persons.

An open-ended question to list ‘other’ sources of stress produced 409 responses indicating a long list of concerns. The phrasing of stressors was unique to each person, with the exception of ‘not knowing when the pandemic will end’ mentioned by five respondents. Based on both responses to the 15 stressors provided in the survey and the extensive list of additional items provided by respondents, it is safe to say that there was a significant amount of stress evident among teachers in the sample.

4.2. Coping strategies

Given the high levels of stress revealed in the above analysis, the second research question asked ‘what coping strategies do teachers use most often?’ Fig. 2 shows the ratings of the frequency of the 15 coping strategies used in the Brief-COPE inventory. The most frequently used coping strategy was acceptance, followed by advanced planning, re-framing, actively doing something about the situation, and using work or other activity as a distraction. All of these are considered approach coping strategies (Carver et al., 1989). The least frequently used coping strategies included disengagement, substance abuse, and denial, all of which are considered avoidant in nature. A planned comparison of the mean total scores for the six approach (M = 31.9, sd = 6.35) and six avoidant types of coping (M = 20.8, sd = 4.95) revealed a substantial difference in how often they were being used (t[585] = 35.4, p < .001). Based on these data, we see that the predominant tendency in the sample was to use active coping to first accept the situation and attempt to deal with it through activity, reframing, and seeking emotional support. This finding helps to reinforce the notion that seeking emotional support is an active, approach-oriented coping strategy and not opposite of ‘problem-focused’ coping.

As recommended by Carver (1997), we performed an analysis to assess the appropriateness of the grouping of active and avoidant coping in the present sample. Using principal components analysis, we requested two factors and rotated them using direct oblimin to allow factors to correlate. The resulting structure matrix (see Table 5) of factor loadings shows that the six approach scales loaded substantially (>0.50) on the first factor and the six avoidant scales loaded substantially on the second factor, with only a small correlation between them (factor correlation = 0.09). The Religion and Humor scales did not load substantially on either factor. This analysis supports the use of categorizing coping strategies as approach (Factor 1) and avoidant (Factor 2) in the present sample.

![Fig. 1. Language teachers’ mean ratings of stressors during the Covid-19 pandemic.](image-url)
4.3. Correlates of approach and avoidant coping

The above results, taken together, show a group of teachers encountering a large number of stressors and feeling the strain of the situation, but more often choosing active coping rather than avoidance. However, that is not to say that everyone is coping equally well. The third research question (RQ3) asked about individual differences in the relationship of stress with approach and avoidance coping. Results show that the total score for the six avoidant-coping styles was significantly correlated with total stress ($r = .52$, $p < .001$), as was the total of the approach-coping strategies ($r = .13$, $p < .01$) but they correlated to a significantly lower degree ($z = 7.54$, $p < .001$).

To display the trend in this data, the sample was divided into quartiles based on the total stress scores, creating four groups (low stress, below average, above average, and high stress) in order to compare group means for approach and avoidant coping scores. A 2 x 4 repeated-measures ANOVA revealed significant main effects of coping strategy ($F[1, 582] = 1306.4$, $p < .001$, $\eta^2 = 0.69$) and quartile group ($F[3, 582] = 24.03$, $p < .001$, $\eta^2 = 0.11$), as well as a significant interaction ($F[3, 582] = 10.02$, $p < .001$, $\eta^2 = 0.05$). The interaction in Fig. 3 shows that mean levels of approach coping (the tall bars) do not differ significantly across quartiles ($F[3596] = 2.25$, $p = .08$), but the mean use of avoidant coping strategies (shorter bars) increases consistently and significantly ($F[3596] = 48.4$, $p < .001$) as stress quartile increases.

The above analyses show that individual teachers who were engaging more often with avoidant coping were also experiencing progressively higher levels of perceived stress. Although cross-sectional data such as these cannot conclusively tease apart the causal sequence, coping is a reaction to stress that takes place in an iterative process of appraisals and coping, triggered by the ongoing presence of stressors and adaptations to them (Lazarus & Folkman, 1984). Reporting higher scores for stress indicates that, to some degree at least, coping strategies are not working successfully to mitigate the perceived stress. As these processes settle into a stable pattern, the results suggest that teachers under the most stress are relying most on avoidant coping, compared to the teachers under less stress.

A similar pattern of relying on avoidance coping was also observed for the other negative outcome variables. The correlations of avoidance coping with anxiety ($r = 0.52$, $p < .001$), anger ($r = 0.42$, $p < .001$), sadness ($r = 0.54$, $p < .001$), and loneliness ($r = 0.45$, $p < .001$) all were significant. However, the correlations of those variables with approach coping ($r =
0.003, $r = -0.024$, $r = 0.047$, and $r = 0.020$) were all non-significant (see Table 6a). These results show that in addition to stress reported above, teachers who are using the avoidant coping strategies more often are experiencing increased negative emotions, but that these emotions are not correlated significantly with use of approach coping strategies. These results are consistent with the notion that there is an emotional cost of coping only when it comes to using the avoidant style.

The second part of RQ3 asked about correlations of approach and avoidant coping with the positive outcome variables (see Table 6b). Results show that approach coping total scores correlated significantly (all $p < .001$) with the positive outcomes. Avoidant coping correlated negatively with the positive outcomes, but not with growth ($r = 0.01$). In these data, when examining wellbeing and its correlates, we see approach and avoidant coping acting in similar but opposing manners, like opposite ends of a seesaw. In the case of positive outcome measures, more approach and less avoidant coping both were associated with more positive outcomes. The correlation patterns observed for positive versus negative outcomes shows that positive and negative outcomes cannot be assumed to operate inversely.

4.4. Specific coping strategies predict positive and negative outcomes

Whereas RQ3 provided an overview of the patterns, RQ4 asked about the ability of the 14 specific strategies of the Brief-COPE inventory to predict positive and negative outcomes. Table 7 shows the results of a stepwise multiple regression with each of the five positive-outcome variables. Stepwise regression retains only predictors that add significant levels of unique prediction to equation. A noteworthy caveat with stepwise regressions is that each beta weight in the equation must be interpreted in conjunction with the other beta weights in the equation because the value of beta changes each time a predictor is added or deleted. In addition, the analyses to follow have produced several equations with a large number of predictors whose contribution tends to be small.

The pattern of results shows that a variety of approach-coping strategies are predictive of positive outcomes and avoidant-coping strategies tend to negatively contribute to predicting those outcomes. The exceptions to this general rule are a negative contribution of advice-seeking to resilience and planning to WHO-5 wellbeing. It is unclear whether advice-seeking is generally negatively associated with feeling more resilient. However, in the case of planning, the uncertainty of the Covid-19 crisis means that making plans is more problematic than usual as a coping strategy, and this produces a weak negative relationship with overall wellbeing.

The regressions show the value of positive reframing of the situation and avoiding self-blame, strategies implicated in all the positive-outcome variables. On the one hand, although very few people likely accept blame for the Covid-19 virus, the reaction to the emergency conversion to online teaching might be at play here. The skillset required for online teaching and developing courses that work well in the online environment takes time. Teachers in the present study were not given much time to move online — less than a week in most cases — and those who feel that they are not performing well in their online teaching role might be blaming themselves.

Table 8 presents the prediction equations for the negative outcomes including stress, anxiety, anger, sadness, and loneliness. Three of the strategies, self-blame, venting, and disengagement, are consistently implicated in all of these negative outcomes, they significantly predict all the negative outcomes. Results suggest that these three strategies are to be avoided as their increased use consistently contributes to the negative outcomes.

There were also a few unexpected predictors. Planning appears to be working in a negative way, contributing positively to increasing stress and anxiety and negatively to wellbeing. If planning in an uncertain and uncontrollable situation has a negative effect on wellbeing, it makes sense that the effect also emerges for stress and anxiety. Uncertainty abounds globally and in local education contexts, and those who prefer to rely on advance planning may be finding themselves suffering because of the difficulty of making plans at this time. Responses to Covid-19 may be rewarding those teachers who show
### Table 6a
Pearson correlations between approach and avoidant coping strategies and negative outcome variables.

|          | Avoid | Approach | Anxiety | Anger | Sadness | Loneliness |
|----------|-------|----------|---------|-------|---------|------------|
| Avoid    | –     | –        |         |       |         |            |
| Approach | .11*  | –        |         |       |         |            |
| Anxiety  | .52** | .003     | –       |       |         |            |
| Anger    | .42** | .047     | .41**   | –     |         | –          |
| Sadness  | .54** | .020     | .55**   | .49** | –       | –          |
| Loneliness | .45** | –.024   | .36**   | .33** | .52**   | –          |

Note: *p < .01; **p < .001.

### Table 6b
Pearson correlations between approach and avoidant coping strategies and positive outcome variables.

|          | Avoid | Approach | Health | PERMA | WHO-5 | Resilience | Growth |
|----------|-------|----------|--------|-------|-------|------------|--------|
| Avoid    | –     | –        |        |       |       |            |        |
| Approach | .11*  | –        |        |       |       |            |        |
| Health   | -.21**| .13*     | –      |       |       |            |        |
| PERMA    | -.38**| .30**    | .49**  | –     |       |            |        |
| WHO-5    | -.34**| .20**    | .41**  | .62** | –     |            |        |
| Resilience | -.33**| .18**   | .37**  | .56** | .55** | –          |        |
| Growth   | .04   | .30**    | .12*   | .26** | .28** | .19**      | –      |

Note: *p < .01; **p < .001.

### Table 7
Prediction of positive outcomes by 14 specific coping strategies.

| Health Index | WHO Wellbeing | Resilience | Growing Through Trauma | PERMA Total |
|--------------|---------------|------------|------------------------|-------------|
| (R = .32)    | (R = .58)     | (R = .52)  | (R = .52)              | (R = .60)   |
| Approach Coping |              |            |                        |             |
| Active        | –             | .17        | –                      | .13         | –          |
| Emotional Support | –           | –          | –                      | –          | .23        |
| Advice Seeking | –             | –          | –                      | –          | –          |
| Reframe       | .15           | .11        | .19                    | .14         | .14        |
| Planning      | –             | -.09       | –                      | –          | –          |
| Accept        | .09           | .17        | .18                    | –          | .12        |
| Avoidant Coping |             |            |                        |             |
| Distract      | –             | –          | -.09                   | –          | –          |
| Denial        | –             | –          | –                      | –          | –          |
| Substances    | –             | -.09       | –                      | –          | –          |
| Disengage     | –             | –          | -.09                   | –          | -.08       |
| Venting       | –             | -.15       | –                      | .10         | -.12       |
| Self-Blame    | -.23          | -.33       | -.25                   | .11         | -.30       |
| Other Coping  |              |            |                        |             |
| Religious     | –             | .08        | –                      | .37         | –          |
| Humor         | –             | .12        | .12                    | –          | .13        |

### Table 8
Prediction of negative outcomes by 14 specific coping strategies.

| Anger (R = .47) | Sadness (R = .59) | Loneliness (R = .50) | Anxiety Over 24 h (R = .64) | Stress (R = .52) |
|-----------------|------------------|----------------------|-----------------------------|-----------------|
| Approach Coping |                  |                      |                              |                 |
| Active          | –                | –                    | -.11                        | –               |
| Emotional Support | –             | –                    | –                           | –               |
| Advice Seeking  | –                | –                    | –                           | –               |
| Reframe         | –                | -.09                 | –                           | -.11            |
| Planning        | –                | –                    | –                           | .17             |
| Accept          | –                | -.08                 | –                           | -.16            |
| Avoidant Coping |                  |                      |                              |                 |
| Distract        | –                | .13                  | .18                         | .10             |
| Denial          | –                | –                    | –                           | –               |
| Substances      | –                | .12                  | .11                         | .07             |
| Disengage       | .15              | .17                  | .14                         | .13             |
| Venting         | .28              | .19                  | .10                         | .22             |
| Self-Blame      | .22              | .26                  | .24                         | .28             |
| Other Coping    |                  |                      |                              |                 |
| Religious       | –                | –                    | –                           | -.15            |
| Humor           | –                | –                    | –                           | -.10            |
greater flexibility. The beta weight that runs counter to expectations is venting which appears to contribute positively to
growth, despite consistently contributing to the negative outcomes. The effect on growth during trauma might be a feature of
the way the measure is conceptualized — as a way of using negative experiences in the future. Although venting is consistently
associated with negative emotions, the effect on growth might suggest that there is a weak tendency for respondents to pair
expressing those emotions with a hope for a better future. As a note of caution for interpretation, in addition to the above
caveats for stepwise regression, the large sample size used here can detect significant predictors that might not be declared
significant in studies with a smaller sample. We present the results both for completeness and for possible hypotheses for
future research.

Overall, the regression analyses show that the many stressors associated with Covid-19 implicate a variety of coping
responses in language teachers. In most cases, approach-oriented coping produces more-favorable outcomes and avoidance-
oriented coping produces less-favorable outcomes. Coupled with the correlation and ANOVA analyses for RQ3, these results
show the potentially damaging effects of avoidant coping strategies. Not all coping strategies are to be recommended, and it
would appear that some (accepting self-blame, disengagement, and venting) work against successful coping.

4.5. Implications

Perhaps the major implication emerging from the regression analysis of specific coping strategies is to ‘avoid avoidance.’
Boyce (2013), writing for the Psychology Today blog, lists seven tips to reduce avoidant coping including:

1. Develop tolerance for uncertainty.
2. Take inventory of what one is avoiding during uncertain times.
3. Learn to delegate.
4. Recognize when one is taking on too much responsibility for other people or trying to do too much to protect others from
   negative outcomes.
5. Learn to take action even under uncertain conditions.
6. Recognize procrastination, especially when uncertainty is producing paralysis.
7. Recognize when jumping from one idea to the next is being driven by uncertainty.

The above advice points to the need for teachers to be realistic and moderate in their expectations, especially when dealing
with the uncertainty of the present situation. The dataset in the present study included an open-ended question asking for
each respondent’s advice for other teachers. Data analysis is just beginning and we are working on a companion report to this
one that features the results of the qualitative analysis now underway.

No teacher training program includes a topic such as ‘how to deal with a pandemic’ and switching to online teaching was
done under emergency conditions. The use of a cross-sectional method of data collection, using online questionnaires, does
not allow for a detailed assessment of cause-and-effect between stress and coping or how their relationships change over
time as the pandemic drags on. The data used in the present study was collected at a specific period during which the
pandemic was unfolding. How long the pandemic might last, how stable these patterns are post-pandemic, and whether
avoidance coping continues to be as problematic as shown here, or possibly becomes even more so, is an open question.
Ongoing changes in language pedagogy, including but not limited to the expanded use of online learning in place of face-
to-face instruction, have been accelerated by the Covid-19 pandemic. It is important to study how these trends play out in the
longer term both for language teacher stress and wellbeing. The above results emphasize that future research should not
assume that stress, coping, and wellbeing simply are opposites; their relationship is complex and continually adaptive.
Further, the pattern of relationships among teacher variables is no longer being neglected, it is part of a rapidly expanding
literature (Gkonou et al., 2020; Herman et al., 2020; Mercer & Gregersen, 2020). The findings emerging from these studies can
be used to inform the future training of teachers, with an emphasis on enhancing their psychological health, and reducing
both burnout and the number of teachers quitting the profession.

5. Conclusion

This study shows that during the Covid-19 pandemic, the worldwide response has created a number of difficulties for
language teachers. The rapid conversion to online teaching, the blurred lines between work and home coupled with the
omnipresent concern for the health of family and oneself, has produced high levels of stress. Teachers are coping as best they
can using a variety of techniques. In terms of psychological health and wellbeing, coping techniques that can be considered
more active and approach-oriented, ones that more tackle the issues created by the situation including the emotions aroused,
are associated with more positive outcomes. Perhaps more importantly, increased use of avoidant-coping strategies is
associated with negative psychological outcomes. In particular, it is the increased use of avoidant coping that is associated
with increasing levels of stress and a variety of negative emotions (anxiety, anger, sadness, and loneliness). Within the
approach and avoidant categories of coping are a number of specific strategies being used by the participants, most of which
produced results consistent with the category in which they appear. The multidimensional nature of the stressors requires
multidimensional coping strategies, but clearly some strategies are better than others.
Our hope is that this study can cast light on the effectiveness of coping strategies used by language teachers during the crisis. Such insights are not only relevant in the present but will offer valuable lessons on how best to support teachers in the future who may find themselves in situations of heightened stress such as during transitions across schools, during periods of educational reform, or when facing intense work phases such as end-of-year exam seasons. Being a teacher is stressful at the best of times, learning how to cope with the stress is therefore an invaluable skill that all pre-service and in-service teacher education programs should be integrating as a fundamental professional competence.

Author statement

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Authors’ note

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.system.2020.102352.

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