

Protective factors for teachers' work stress: psychoeducational programs based on self-efficacy and hope to reinforce personal resources

Fattori protettivi per lo stress lavorativo degli insegnanti: programmi psicoeducativi basati sull'autoefficacia e sulla speranza per rafforzare le risorse personali

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Abstract

Teaching at school is subject to stress and tension, which in some cases can lead to pathological conditions and can also lead to the abandonment of the same profession. In literature, the work of the teacher is often associated with stress, so much so that it is often indicated as one of the jobs most exposed to this phenomenon. As a matter of fact, there are many different sources of stress. For example, teaching unmotivated students, dealing with educational changes, and unsatisfactory working conditions. Persistence over time can lead to a strong personal exhaustion and also to the perception of a decline in one's working abilities accompanied by high levels of fatigue and negative attitudes towards one's work. Starting from some personal resources such as self-efficacy and hope, this study analyses the correlation between these resources and stress in a sample of 95 primary and lower secondary school teachers and then proposes a possible psychoeducational intervention.

Keywords: Stress; Self-efficacy; Hope; Mindfulness; Burnout.

Riassunto

Fare formazione a livello scolastico può essere fonte di stress e tensione che in alcuni casi può sfociare in situazioni patologiche e portare all'abbandono della professione stessa. In letteratura il lavoro dell'insegnante è spesso accumulato allo stress tanto che viene indicato come uno dei lavori maggiormente esposti a tale fenomeno. Le fonti di stress sono molteplici. Ad esempio insegnare a studenti non motivati, far fronte al cambiamento educativo e condizioni di lavoro insoddisfacenti. Il perdurare nel tempo di queste situazioni può portare a un forte esaurimento personale e anche la percezione di un declino delle proprie capacità lavorative, accompagnati da alti livelli di stanchezza e atteggiamenti negativi nei confronti del proprio lavoro. Il presente studio, partendo da alcune risorse personali come l'autoefficacia e la speranza, analizza, su un campione di 95 insegnanti di una scuola primaria e secondaria di 1° grado, la correlazione tra queste risorse rispetto allo stress, al fine di proporre un possibile intervento di tipo psicoeducativo di supporto.

Parole chiave: Stress; Autoefficacia; Speranza; Mindfulness; Burnout.

Credit author statement

Anna Maria Mariani is the author of 3, 4, 8 and Limitations and Conclusions. Luigi Picci is the author of 1, 2, 5 and Limitations and Conclusions. Francesco Maria Melchiori is the author of 6, 7 and Limitations and Conclusions.

1. Introduction

Scientific literature in the pedagogical field has shown, in recent years, a growing interest towards the stress perceived by teachers in the professional field. Teachers, at whatever school level they operate, have a key role to play in fostering a climate that supports learning and the social and emotional well-being of students in the classroom. Teacher stress is not just an Italian phenomenon, as it is defined even on an international level (Liu & Onwuegbuzie, 2012; Stoeber & Rennert, 2008) and can have profound negative consequences both on teachers and on the quality of teaching and their relationship with students, leading to poor academic and interpersonal outcomes for students. On a personal level, it has been demonstrated how stress can lead to the development of physical (headaches, ulcers, cardiovascular reactivity) and mental (anxiety, depression, anger) problems in teachers (Pulido-Martos et al., 2016), leading to burn-out (Betoret, 2009). As far as the quality of teaching is concerned, many studies have shown that stress negatively affects teacher performance; as a matter of fact, classes run by teachers with high levels of stress or burnout have lower academic results than the others (Herman, Hickmon-Rosa & Reinke, 2018; Skaalvik & Skaalvik, 2007), also leading to dysfunctional behaviour in students (Wentzel, 2010). Teachers' personal resources can be factors mediating the negative effects of stress. The sense of self-efficacy can be one of the most important protective factors for teachers in managing stressful work situations, avoiding too high a level of stress that could lead to Burnout (Herman, Hickmon-Rosa & Reinke, 2018; İpek et al., 2018; Verešová & Malá, 2012; Schwarzer & Hallum, 2008). Closely related to the sense of self-efficacy is the concept of hope, intended as a set of beliefs that includes both the ability to act and the ability to generate results with respect to objectives (Snyder, 2002). It has been demonstrated that the sense of hope has a positive effect on the level of stress perceived by teachers (Sucan, 2019). The study presented here is the introductory descriptive part of a wider research project, aimed at defining support and training programmes for teachers which include specific work on the development and/or reinforcement of stress protection factors. If the report already described in the literature is confirmed in our sample, the next step will be to structure a psychoeducational project on the participants themselves, working on self-efficacy and sense of hope. In the following paragraphs the wider theoretical perspective is presented to draw the following research hypothesis about teachers: the presence of a determined path of relationship among burnout, stress, self-efficacy, and hope (H1); self-efficacy and hope statistically significantly predict burnout and stress levels. (H2). In this perspective this research constitutes not only a replication of previous studies to check the soundness of the theoretical model, but also the opportunity to verify it in an emergency context, where a higher level of distress and onset of related disorder are expected.

2. Stress and Burnout in Teachers

The profession of teacher belongs to those professions that require characteristics that are significant to the person who carries them out from different points of view: emotional, cognitive, social, and even physical. Society and the world of work have changed profoundly in recent years and are constantly changing at a much faster rate than in the past. Facing situations of change, with uncertain and often complex scenarios, is one of the elements that most puts people under psychophysical stress. In the educational field, teachers are affected by changes and new equilibriums and find themselves subject to numerous stresses and pressures, with often ambiguous, unclear and undefined objectives, lacking adequate tools and sometimes forced to cope with transformations that they often do not share. According to various studies (Fernet et al., 2012; Skaalvik & Skaalvik, 2011a; 2011b; Kačmárová & Kravcová, 2011) the most stressful factors for the teaching profession are: inadequate conditions in the classroom and at school, organisational and programmatic changes, dysfunctional behaviour of pupils, conflicts with colleagues and parents, excessive workload, lack of administrative support.

Teacher stress is identified by several authors as an unpleasant emotional experience resulting from teaching responsibilities, characterised by states such as anger, tension, disappointment or depression (Collie, Shapka, & Perry, 2012; Liu & Onwuegbuzie, 2012; Khan et al., 2012; Kyriacou, 2001). When these negative experiences last too long, they can lead to emotional exhaustion and the perception of a decline in one's ability to work, together with high levels of fatigue and negative attitudes towards work (Picci,

Sgorlon & Peluso Cassese, 2020). The chronic stress can be emotionally draining and poses the risk of burnout (Maslach & Jackson, 1981). Burnout is defined by Maslach & Jackson (1981) as “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do “people-work” of some kind” (p. 99). People in burnout feel they are no longer able to give of themselves at a psychological level. High levels of stress and burnout interfere with the teacher’s goals of effective teaching practice and may lead to the development of dysfunctional attitudes and interactions with students (Lamude, Scudder, & Furno-Lamude, 1992). Furthermore, Geving (2007) has shown that dysfunctional teachers’ behaviours provoke negative behaviours in students, such as damaging school property, criticising other pupils or talking back to the teacher, up to antisocial and oppositional/provocative behaviours, such as bullying (Kokkinos, 2007).

A study by Skaalvik and Skaalvik (2015) clearly showed that teachers at any age range cope well with school stress, but older teachers need more time to re-establish a balance. According to Jennet, Harris and Mesibov (2003) most teachers have effective coping strategies on stress. Teachers’ personal resources can play a decisive role in buffering the effects of work stress on performance (Bakker & Demerouti, 2007) which we will examine in the next paragraph.

3. Teachers’ personal resources: self-efficacy and sense of hope

Each individual has at his or her disposal a number of resources that guide him or her and allow him or her to act so that he or she can achieve his or her objectives (Hobfoll, 2002). These resources can be either occupational or personal. Work-related resources concern the organisational, social, and psychological aspects of work and are linked to the achievement of work objectives (Bakker & Demerouti, 2007), such as autonomy, support, feedback, employment success (Grebner, Elferingand & Semmer, 2010). Personal resources, on the other hand, refer to those personal elements associated with self-assessment, which allow to control and influence their environment (Hobfoll et al., 2003), such as self-efficacy, self-esteem, optimism and hope (Kutcher et al., 2010; Luria & Torjman, 2009; Tremblay & Messervey, 2011). In our study, we considered two of the elements that can be the subject of psychoeducational support programmes for teachers, namely self-efficacy and dispositional hope, between which a close correlation was found. The construct of self-efficacy is a fundamental concept of Bandura’s Cognitive Social Theory (1977) and is the core element of human agility, i.e. the ability to act intentionally to modify the environment and circumstances of life (Bandura, 2006). Depending on the level of perceived self-efficacy, the way of perceiving the opportunities and obstacles coming from the environment also changes and, consequently, the objectives, values, and behaviour of the individual change (Bandura, 2006; Schunk & Meece, 2006). Moreover, self-efficacy has a direct influence on motivation, as individuals choose and act persistently in the task, only if they think they are competent and able to perform it.

Work-related self-efficacy influences how the worker manages work stress and succeeds in staying focused on professional goals. In the educational field, it has been highlighted that teachers’ perception of self-efficacy influences job satisfaction and mediates stress (Klassen & Chiu, 2010). Teachers’ self-efficacy seems to be negatively associated with stress and burnout among them, with several evidences attesting the presence of a reciprocal effect over time (Brouwers & Tomic, 1999). Maslach, Schaufeli and Leiter (2001) state that inefficacy derives from lack of resources to meet the excessive demands to which one is subjected and it is possible to state that stress and self-efficacy of the teacher are evidently linked and multidirectional (Herman, Hickmon-Rosa & Reinke, 2018). In accordance with Bandura’s model of reciprocal causality, effectiveness in class management seems to be linked to the level of self-efficacy perceived by teachers (Reinke, Herman & Stormont, 2013), this is because those who are more confident in their management skills take on more functional behaviours and practices towards students, who respond with better results. Moreover, the positive responses of students help to increase the teachers’ perception of effectiveness, creating a positive loop (Han & Weiss, 2005). According to Caprara and others (2006), students of teachers with a high sense of self-efficacy have a higher motivation to study and better academic results.

Besides self-efficacy, another very important resource for teachers in the functional management of the class group, are the positive beliefs that influence teachers’ professional success. In this context, our study

focused on the sense of hope and how this relates to teachers' self-efficacy and stress management. According to Snyder and others (1991) we can define hope as "a cognitive ensemble which is based on a mutual sense of acting effectively (direct determination towards the goal) and strategy (planning to achieve goals)" (p. 571). Snyder's theory of hope is centred on the focus towards the goal, but only those goals that have a value and meaning for the person are considered valid for the sense of hope. Goals can be directed towards achieving an expected result, or towards avoiding an unwanted state (Hellman, Pittman & Munoz, 2013). Both strategic thinking to achieve the goals and the sense of acting effectively seem to be linked to the production of alternatives of action when the former has proved to be closed (Snyder et al., 1991) and to a positive internal dialogue. People who experience a stressful event on their way to achieving a value goal and have high levels of hope, see such stressors as challenges to overcome and generate alternatives and motivation. There is a correlation between hope and states of anxiety (Nolan & Stitzlein, 2011), satisfaction in life (Brdar & Kashdan, 2010) and organisational commitment (Bullough Jr & Hall-Kenyon, 2012). Sezgin and Erdogan (2015), in their research, found a positive relationship between teachers' perception of self-efficacy and academic success, optimism, and hope. Moreover, the study conducted by Sukan (2019) showed a negative correlation between the level of hope and perceived stress, so with high levels of hope, individuals experience less stress in everyday life and a lower level of general stress. Nietfield and Enders (2003) also found that the most confident individuals have a higher level of self-efficacy in their teaching and also tend to have greater mastery of their actions.

4. Participants

Considering the absence of any incentives for participants, from April to May 2020 (Covid lockdown period), 110 completed questionnaires were collected among teachers recruited via social media channels, who provided their informed consent. After data screening for missing data, incongruent/unengaged respondents and biased outliers, a sample of 95 respondents were considered in the statistical analysis. Data are mean \pm standard error, unless otherwise stated. The sample demographic characteristics were not completely balanced, e.g. 90.53% were female, but no data transformation was made because they were considered to reflect the asymmetric distribution in the population. More in detail, the mean age was 47.68 ± 10.35 , the education level 46.32% high school degree and 54.68% BA/MA or higher, and 67.36% in a relationship. Subsequently, few inferential tests of difference (i.e. t-test and χ^2 according to variable nature) were run to verify the presence of statistically significant role of demographic variables on relevant variables (i.e. Emotional Exhaustion (EE), Depersonalization (DP), Personal Accomplishment (PA), I-PSS, DAHS, Emotional Maturity (EM), Finalization of the action (FA), Relational fluency (RF), Context analysis (CA) and none worth-mentioning effect was found, when also controlling for normality and equality of variance assumptions.

5. Measures

Regarding PSS and DAHS scales, the items have been translated into Italian by experts in the topic fluent in English and a translation back to English was subsequently carried out by a professional translator to check compliance with original version.

Burnout Inventory as defined by Maslach and Jackson (1981), consists of 22 symptom items that measure three dimensions: emotional exhaustion (EE), depersonalization (DEP), and personal accomplishment (PA). In the Italian version (Sirigatti & Stefanile, 1993) all items are scored using a six-level frequency scale from "never" to "daily". Emotional exhaustion is considered the core dimension of burnout (Maslach et al., 2001). Depersonalization refers to emotional and cognitive disengagement from one's job and a distant, cynical attitude toward it. The third burnout dimension, reduced personal accomplishment, describes the feeling of not being able to make a meaningful contribution and overall reduced efficacy at work (Maslach & Jackson, 1981).

Perceived Stress Scale - PSS (Cohen, Kessler & Underwood Gordon, 1997) is composed by 10 items with a 5-point likert scale, from "never" to "very often" and it investigates feelings and thoughts related to

the last month, concerning different aspects of daily life. It is based on an integrated stress model that combines biological, psychological, and environmental approaches with stress level measurement. According to this model, when individuals encounter demands from the environment, they first assess whether these demands are a potential risk and whether they have sufficient adaptive capacity to adequately respond. If they find the demands onerous or threatening and, at the same time, assess their inadequate resources, they feel “under stress”. The perception of stress is directly related to a negative emotional response. If at very high levels, these negative emotional states can lead to the onset of psychic disorders and activate physiological or behavioural responses that can subject the individual to the risk of physical or mental illness.

The Scale of perceived self-efficacy in managing complex problems (PSE-MCP) in the Italian version is composed by 24 items (Avallone, Pepe & Porcelli, 2007) and the participant evaluate according to a 5-point likert scale. It provides four distinct scores for each subject, in relation to four dimensions of the self-efficacy construct; this was specifically chosen considering that teachers confronted with complex and unforeseen situations. The four facets were the following:

- *Emotional maturity* (EM) concerns people’s beliefs about their own abilities to deal with stressful situations, or to deal with unforeseen situations, or to have a sound self-control over difficult events and situations.
- *Finalization of the action* (FA) regards beliefs that people have about their own ability to set concrete and achievable objectives to reach, in order to prioritise and to adapt them to their own competencies and to pursue the objectives established.
- *Relational fluency* (RF) is the belief that people have about their own abilities to interact and engage others; to give and ask for help, to maintain good relationships with others, and to manage interpersonal conflicts.
- *Context analysis* (CA) refers to people’s beliefs about their own abilities to “read” the context in which they are operating by capturing the links between the different events and situations; to understand the demands that come from the people of the environment and to use a language adapted to the different circumstances.

Dispositional Adult Hope Scale (DAHS) (Snyder et al., 1991; Snyder 2002) measures the level of hope in adults according to the cognitive model that defines hope as “a positive motivational state based on a sense of success with regards to (a) action (energy directed to the goal) and (b) pathways (planning to achieve goals)”. (Snyder, Irving & Anderson, 1991, p. 287). The questionnaire consists of 12 items, of which 4 items concern pathways thinking, four measure agency thinking, and other four items are fillers. The participants evaluate according to an 4-point Likert scale (from Definitely False to Definitely True).

6. Data Analysis

All the statistical analysis were conducted using JASP software version 0.12.2 (JASP Team, 2020). Firstly, multiple pairwise correlations were used to analyse the pattern of relationships among the selected construct scales (H1). Secondly, four forward-method multiple regressions were used to separately predict both the Burnout (all the three dimensions) and the I-PSS scores, which were considered liable constructs during covid-19 emergency, through independent variables representing the perceived self-efficacy in managing complex problems and the Dispositional Adult Hope. The stepwise regression (forward selection) was selected because it assured to obtain the most synthetic statistically significant model. In fact, at the beginning the model presents no variables, and the addition of each variable is tested considering a chosen model fit criterion (e.g. $p < .05$), and adding the variable (if any) only if its inclusion determines the most statistically significant improvement of the fit. This automatic variable selection procedures is replicated until the model cannot be improved to a statistically significant extent.

7. Results

Initially, the correlations matrix was analyzed to confirm the predicted path of relationships among burnout, stress, self-efficacy, and hope (H1). As expected, I-PSS showed a statistically significant positive correlation with EE (moderate) and DEP (weak), while it presented a negative statistically significant correlation with DAHS (moderate) and the measures of self-efficacy (from weak to moderate). As shown in Table 1 (below), the same pattern is present between the dimensions of burnout and DAHS (negative statistically significant correlation of weak entity) and the measures of self-efficacy (specifically negative statistically significant correlation for EM and FA to interpret as weak).

Variable	I-PSS	emotional exhaustion	depersonalization	Personal Accomplishment	ADHS	EM	FA	RF	CA
1. I-PSS	–								
2. emotional exhaustion	0.47 ***	–							
3. depersonalization	0.34 ***	0.54 ***	–						
4. Personal Accomplishment	-0.27 **	-0.14	-0.33 ***	–					
5. ADHS	-0.55 ***	-0.23 *	-0.27 **	0.49 ***	–				
6. EM	-0.57 ***	-0.46 ***	-0.34 ***	0.50 ***	0.53 ***	–			
7. FA	-0.34 ***	-0.23 *	-0.21 *	0.48 ***	0.63 ***	0.65 ***	–		
8. RF	-0.26 *	-0.27 **	-0.16	0.51 ***	0.45 ***	0.52 ***	0.59 ***	–	
9. CA	-0.23 *	-0.16	-0.07	0.46 ***	0.34 ***	0.45 ***	0.57 ***	0.66 ***	–

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 1: Pearson's Correlations Matrix

Subsequently, the forward-method multiple regression that statistically significantly predicted I-PSS, $F(3, 91) = 24.94$, $p < .001$, $\text{adj. } R^2 = .43$, included only EM ($t = -4.95$ $p < .001$), DAHS ($t = -4.49$ $p < .001$), FA ($t = -2.52$ $p < .001$) as predictors. Regarding the Burnout dimensions, the forward-method multiple regression that statistically significantly predicted EE, $F(1, 93) = 24.72$, $p < .001$, $\text{adj. } R^2 = .20$, included only EM ($t = -4.97$ $p < .001$), as predictor. Differently, the model that statistically significantly predicted DEP, $F(1, 93) = 24.72$, $p < .001$, $\text{adj. } R^2 = .11$, included only EM ($t = -3.53$ $p < .001$), as predictor. Lastly, the forward-method multiple regression that statistically significantly predicted PA, $F(1, 93) = 18.13$, $p < .001$, $\text{adj. } R^2 = .37$, included only EM ($t = 2.08$ $p < .001$), DAHS ($t = 2.46$ $p < .001$), RF ($t = 2.84$ $p < .001$) as predictors.

8. Proposal of a psychoeducational intervention

The present study carried out an investigation on the relationship among work stress and teachers' personal resources, in particular self-efficacy and hope. Our results confirm that there's a correlation among the variables. As already found in literature, self-efficacy and hope can help in managing teachers' stress, avoiding burn-out. The teachers' resources can act as moderator by minimizing negative effects of stress. Actually, educational institutions are focused on teachers' training supporting their competencies in classroom management, specific subject, relationship with colleagues and parents. According to literature and our findings, teachers' training programs should focus also on professional development activities that help them with key life skills to better respond to the demands of their work. Combined with study results, the proposal of a psychoeducational intervention to foster self-efficacy and dispositional hope through mindfulness training has a strong rationale, and the protocol to carry out a first pilot MBI study on a small sample of teachers has already been under development. Kabat-Zinn (2003) described mindfulness as "paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment." (p. 144). The two main components of mindfulness are refined attentional skills and an open, non-evaluative attitude toward the different mental experiences that may arise (Brown, Ryan, &

Creswell, 2007; Malinowski, 2008). Mindfulness practice in adults suggests that it can enhance attentional and emotional self-regulation and flexibility with benefits for both teachers and students (Meiklejohn et al., 2012). Other studies show that personal training in mindfulness skills can foster teachers' well-being and work engagement thanks to an increase in positive affect, hope, and optimism as well as teaching self-efficacy and the ability to manage classroom and establish good relationship with students (Malinoski & Him, 2015). Meiklejohn et al. (2012) stated also that mindfulness ability to be aware of difficult situations and negative emotions, suspending automatic responding (Non-Reacting Mindfulness Facet), positively influences self-efficacy, resilience, hope and optimism, defined as the four corner stones of Psychological Capital. In particular, it helps the motivation and capability to direct one's pathways to achieve desired goals (Snyder, 2002) and a positive attitude to one's own future success (Carver & Scheier, 2005). Mindfulness-based interventions (MBIs) have been suggested as one kind of professional development program that may foster these types of skills (Roeser et al., 2013). One example is described in Roeser et al.'s research (2013) where an 8-week Training Program (11 sessions) was delivered for a total of 36 contact hours. In that case, the MT employed a variety of pedagogical activities designed to foster mindfulness and self-compassion as personal resources that teachers can use to cope with stress more effectively, while the experiential program had five teaching activities: guided mindfulness and yoga practices, group discussions of mindfulness practice, small-group activities to practice skills in real-life scenarios, lecture and guided home practices, and homework assignments (Roeser et al., 2012). The results of the research show that MT is feasible and efficacious in helping teachers to reduce stress, giving them skills to more effectively manage stress on the job and, by inference, better attend to the interpersonal and instructional complexities of teaching and learning.

9. Limitations

This study presents some limitations that need to be addressed. Generalizability of the findings is restricted by the limited non-random and voluntary sample, that cannot be considered representative of the entire population for this reason. Lastly, confirmation of a causal model required the use of more powerful statistical methods of data analysis (e.g. Structural Equation Modeling), that could not be adopted due to the low number of respondents. In the perspective of developing an intervention adapting the MBI protocol, it will be necessary to verify the sustainability of delivery of a complete mindfulness protocol and the possible adaptation to the needs of school teachers, without forgetting the possible cultural barriers to this type of intervention. Lastly, the MT dimension of effect has to be evaluated in relation to the peculiarity of the Italian context and teacher population, where a protocol similar to the one of Roeser et al.'s research (2013) could be perceived as too burdensome and ultimately resolve in lower attrition/efficacy.

10. Conclusions

Evidence from the matrix and regressions supports the relationships already identified from previous literature. As Miller said in 1980 (as cited in Lamal, 1990), "The fact that a theory has passed one test provides no evidence at all that it will pass a repetition of the test" (p. 32). They also remain valid even in a moment of particular stress such as that of the Covid emergency.

It is also necessary to deepen the aspect that concerns hope and positive thinking. In the literature, hope has been associated with a positive attitude towards what is happening (Marques, Pais-Ribeiro & Lopez, 2009). Positive thinking is an accelerator of emotional, physical and behavioral change and there are intervention programs that can support the development of one's skills in order to have more resources that can be used when new events arise. Training the mind to face something new and unexpected by observing what happens from different points of view can activate new resources by creating an active and positive comparison with reality (Nave & Roman, 2018). On the other hand, there is evidence that the eudamonic attitude is related to the satisfaction of basic psychological needs (Kernis & Goldman, 2005) and that these aspects can ensure happiness (Sobol-Kwapinska, Jankowski & Przepiorka, 2016).

Therefore, a training intervention to support strategies that improve self-efficacy and dispositional hope

could be useful to face unexpected difficulties. In particular, we support the development of mindfulness training program in order to enhance personal teachers' resources to cope with stressful events in their profession. Furthermore, the mindfulness skills acquired by teachers could be transferred by them to their students through the adoption of particular didactic activities during the daily lessons. Nowadays, training programs for teachers are focused on "technical skills" linked to the subjects of their profession, less attention is dedicated to personal resources and to a total approach to the person (body and mind as one). For these reasons, it seems necessary to further develop the research in the direction of the definition of the causal model (demonstrating the role of each endogenous / exogenous construct) and the introduction of further relevant constructs such as coping strategies and resilience. Besides, it's our intention to put in place a training intervention to a sample of teachers working in different school level with a Mindfulness approach that can test the efficacy in different educational contexts both on a teachers' well-being point of view and a students' academic results area.

References

- Avallone, F., Pepe, S., & Porcelli, R. (2007). Autoefficacia percepita nella ricerca del lavoro: Scale di misura. In A. Grimaldi (Ed.), *Bisogni, valori e autoefficacia nella scelta del lavoro* (pp. 133-142). Roma: ISFOL.
- Bakker, A. B., & Demerouti, E. (2007) The job demands-resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. F. Feeman.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares, & T. Urdan (Eds.), *Self-efficacy belief of adolescents*, 307-337. Greenwich, CT: Information Age.
- Betoret, F. D. (2009). Self-Efficacy, School Resources, Job Stressors and Burnout among Spanish Primary and Secondary School Teachers: A Structural Equation Approach. *Educational Psychology*, 29, 45-68. <http://dx.doi.org/10.1080/01443410802459234>.
- Brdar, I., & Kashdan, T. B. (2010). Character strengths and well-being in Croatia: An empirical investigation of structure and correlates. *Journal of research in personality*, 44(1), 151-154.
- Brouwers, A., & Tomic, W. (1999). Teacher burnout, perceived self-efficacy in classroom management, and student disruptive behaviour in secondary education. *Curriculum and Teaching*, 14(2), 7-26.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237. <http://dx.doi.org/10.1080/10478400701598298>.
- Bullough Jr, R. V., & Hall-Kenyon, K. M. (2012). On teacher hope, sense of calling, and commitment to teaching. *Teacher Education Quarterly*, 7-27.
- Caprara, G.V., Barbaranelli, C., Steca, P., & Malone, P.S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44, 473-490.
- Carver, C. S., & Scheier, M. S. (2005). Optimism. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology*, 231-243. Oxford, UK: Oxford University Press.
- Cohen, S., Kessler, R.C., & Underwood Gordon, L. (1997). *Measuring Stress: A Guide for Health and Social Scientists*. New York: Oxford University Press on Demand.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School Climate and Social-Emotional Learning: Predicting Teacher Stress, Job Satisfaction, and Teaching Efficacy. *Journal of Educational Psychology*, 104, 1189-1204. <http://dx.doi.org/10.1037/a0029356>.
- Fernet, C., Guay, F., Senécal, C., & Austin, S. (2012). Predicting Intraindividual Changes in Teacher Burnout: The Role of Perceived School Environment and Motivational Factors. *Teaching and Teacher Education*, 28, 514-525. <http://dx.doi.org/10.1016/j.tate.2011.11.013>.
- Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education*, 23, 624-640.
- Grebner, S., Elferingand, A., & Semmer, K. (2010). The success resource model of job stress. In D. C. Ganster & P. L. Perrewe (Eds.), *New Developments in Theoretical and Conceptual Approaches to Job Stress. Research in Occupational Stress and Well Being*, vol. 8, 61-108. Bingley, UK: Emerald Group Publishing Limited.
- Han, S.S., & Weiss, B. (2005) Sustainability of Teacher Implementation of School-Based Mental Health Programs. *Journal of Abnormal Child Psychology*, 33(6), 665-679. <http://dx.doi.org/10.1007/s10802-005-7646-2>.
- Hellman, C.M., Pittman, M.K., & Munoz, R.T. (2013). The First Twenty Years of the Will and the Ways: An Ex-

- amination of Score Reliability Distribution on Snyder's Dispositional Hope Scale. *Journal of Happiness Studies*, 14(3), 723-729. <http://dx.doi.org/10.1007/s10902-012-9351-5>.
- Herman, K.C., Hickmon-Rosa, J., & Reinke, W.M. (2018). Empirically Derived Profiles of Teacher Stress, Burnout, Self-Efficacy, and Coping and Associated Student Outcomes. *Journal of Positive Behavior Interventions*, 20(2), 90-100.
- Hobfoll, S.E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307-324.
- Hobfoll, S.E., Johnson, R.J., Ennis, N., & Jackson, A.P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632-643.
- İpek, H., Akcay, A., Bayindir Atay, S., Berber, G., Karalik, T., & Yilmaz, T.S. (2018). The Relationship Between Occupational Stress And Teacher Self-Efficacy: A Study With EFL Instructors. *Anadolu Journal of Educational Sciences International*, 8(1), 126-150. DOI: 10.18039/ajesi.393945.
- JASP, T. (2020). JASP (Version 0.12. 2)[computer software].
- Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, 33, 583-593.
- Kabat-Zinn, J. (2003). Mindfulness-Based Interventions in Context: Past, Present, and Future. *Clinical Psychology: Science and Practice*, 10(2), 144-156.
- Kačmárová, M., & Kravcová, M. (2011). Zdroje stresu a stratégie zvládania v u ite skej profesii. In M. Mária Dupkalová & I. Ištvan (Eds.), *Medzinárodná vedecká elektronická konferencia pre doktorandov, vedeckých pracovníkov a mladých vysokoškolských u ite ov*, 215-223. Prešov: FHPV.
- Kernis, M. H., & Goldman, B. M. (2005). From thought and experience to behavior and interpersonal relationships: A multicomponent conceptualization of authenticity. In A. Tesser, J. V. Wood, D. A. Stapel, & A. Diederik (Eds.), *On building, defending and regulating the self: A psychological perspective* (pp. 31-52). New York, NY, US: Psychology Press.
- Khan, A., Shah, IM., Khan, S., & Gul, S. (2012). Teachers' Stress, Performance & Resources The Moderating Effects of Resources on Stress & Performance. *International Review of Social Sciences and Humanities*, 2, 21-29
- Klassen, R., & Chiu, M. M. (2010). Effects of Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology*, 102, 741-756. <http://dx.doi.org/10.1037/a0019237>.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229-243.
- Kutcher, E., Bragger, J., Srednicki, R. & Masco, J. L. (2010). The role of religiosity in stress, job attitudes, and organizational citizenship behavior. *Journal of Business Ethics*, 95(2), 319-337.
- Kyriacou, C. (2001). Teacher stress: directions for future research. *Educational Review*, 53, 27-35. <http://dx.doi.org/10.1080/00131910120033628>.
- Lamal, P. A. (1990). On the importance of replication. *Journal of Social Behavior and Personality*, 5(4), 31-35. Online ISSN: 2168-3263.
- Lamude, K. G., Scudder, J., & Furno-Lamude, D. (1992). The relationship of student resistance strategies in the classroom to teacher burnout and teacher type-A behavior. *Journal of Social Behavior and Personality*, 7, 597-610.
- Liu, S., & Onwuegbuzie, A. J. (2012). Chinese Teachers' Work Stress and Their Turnover Intention. *International Journal of Educational Research*, 53, 160-170. <http://dx.doi.org/10.1016/j.ijer.2012.03.006>.
- Luria, G., & Torjman, A. (2009). Resources and coping with stressful events. *Journal of Organizational Behaviour*, 30(6), 685-707.
- Malinowski, P. (2008). Mindfulness as psychological dimension: concepts and applications. *Irish Journal of Psychology*, 29(1), 155-166.
- Malinowski, P., & Lim, H.J. (2015) Mindfulness at Work: Positive Affect, Hope, and Optimism Mediate the relationship Between Dispositional Mindfulness, Work Engagement, and Well-Being. *Mindfulness*, 60, 1250-1262.
- Marques, S. C., Pais-Ribeiro, J., & Lopez, S. J. (2009). The impact of a hope intervention on positive thinking, mental-health and academic achievement in middle-school students. *Psychology & Health*, 24, suppl. 1.
- Maslach, C., & Jackson, S.E. (1981). The Measurement of Experienced Burnout. *Journal of Organizational Behavior*, 2(2), 99-113.
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job Burnout. *Annual review of psychology*, 52(1), 397-422.
- Meiklejohn, J., Phillips, C., Freedman, M.L., Griffin, M.L., Biegel, G., Roach, A., Frank, E., Burke, C., Pinger, L., Soloway, G., Isberg, R., Sibinga, E., Grossman, L., & Saltzman, A. (2012). Integrating Mindfulness Training into K-12 Education: Fostering the Resilience of Teachers and Students. *Mindfulness*, 3, 291-307.
- Nave, T., & Roman, A. (2018). Is Positive Thinking Magical? In *ERD 2018 - Education, Reflection, Development*, 6th Edition, Book Series: European Proceedings of Social and Behavioural Sciences, 63, 259-265.

- Nietfield, J.L., & Enders, C.K. (2003). An examination of student teacher beliefs: Interrelationships between hope, self-efficacy, goal-orientations, and beliefs about learning. *Education*, 6, 1-36.
- Nolan, C., & Stitzlein, S. M. (2011). Meaningful hope for teachers in times of high anxiety and low morale. *Democracy and Education*, 19(1), 2.
- Piceci, L., Sgorlon A., & Peluso Cassese, F. (2020). Stress of teachers: the transition to distance learning during the covid/19. *QTimes, webmagazine*, XII, 3, 356-368.
- Pulido-Martos, M., Lopez-Zafra, E., Estévez-López, F., & Augusto-Landa, J.M. (2016). The Moderator Role of Perceived Emotional Intelligence in the Relationship between Sources of Stress and Mental Health in Teachers. *The Spanish Journal of Psychology*, 19, E7. doi: 10.1017/sjp.2016.8
- Reinke, W.M., Herman, K.C., & Stormont, M. (2013). Classroom-Level Positive Behavior Supports in Schools Implementing SW-PBIS: Identifying Areas for Enhancement. *Journal of Positive Behavior Interventions*, 15(1), 39-50.
- Roeser, R. W., Horn-Keller, P., Stadick, M., & Urdan, T. (2012). Teaching, learning and transfer in a mindfulness-based stress reduction program for teachers. In *meeting of American Educational Research Association*, Vancouver, British Columbia, Canada.
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Oberle, E., Thomson, K., Taylor, C., & Harrison, J. (2013). Mindfulness Training and Reductions in Teacher Stress and Burnout: Results From Two Randomized, Waitlist-Control Field Trials. *Journal of Educational Psychology*, 105(3), 787. <http://dx.doi.org/10.1037/a0032093>.
- Schunk, D. H., & Meece, J. L. (2006). Self-Efficacy Development in Adolescence. In F. Pajares, & T. Urdan (Eds.), *Self-Efficacy Beliefs of Adolescents*, (pp. 71-96). Greenwich, CT: Information Age Publishing.
- Schwarzer, R., & Hallum, S. (2008). Perceived Teacher Self-Efficacy as a Predictor of Job Stress and Burnout: Mediation Analyses. *Applied Psychology: An International Review*, 57, 152-171. <http://dx.doi.org/10.1111/j.1464-0597.2008.00359.x>.
- Sezgin, F., & Erdogan, O. (2015). Academic Optimism, Hope and Zest for Work as Predictors of Teacher Self-efficacy and Perceived Success. *Educational Sciences: Theory & Practice*, 15(1), 7-19.
- Sirigatti, S., & Stefanile, C. (1993). Adattamento e taratura per l'Italia. In C. Maslach & S. Jackson, *MBI Maslach Burnout Inventory, Manuale*, (pp. 33-42). Firenze: Organizzazioni Speciali.
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99, 611-625.
- Skaalvik, E. M., & Skaalvik, S. (2011a). Teacher Job Satisfaction and Motivation to Leave the Teaching Profession: Relations with School Context, Feeling of Belonging, and Emotional Exhaustion. *Teaching and Teacher Education*, 27, 1029-1038. <http://dx.doi.org/10.1016/j.tate.2011.04.001>.
- Skaalvik, E. M., & Skaalvik, S. (2011b). Teachers' Feeling of Belonging, Exhaustion, and Job Satisfaction: The Role of Goal Structure and Value Consonance. *Anxiety, Stress, and Coping: An international Journal*, 24, 369-385. <http://dx.doi.org/10.1080/10615806.2010.544300>.
- Skaalvik, E. M., & Skaalvik, S. (2015). Job Satisfaction, Stress, and Coping Strategies in the Teaching Profession. What Do the Teachers Say? *International Education Studies*, 8, 181-192. <http://dx.doi.org/10.2466/14.02.PR0.114k14w0>
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13, 249-275. http://dx.doi.org/10.1207/s15327965pli1304_01.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.
- Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). Hope and health. *Handbook of social and clinical psychology: The health perspective*, 162, 285-305.
- Sobol-Kwapinska, M., Jankowski, T., & Przepiorka, A. (2016). What do we gain by adding time perspective to mindfulness? Carpe Diem and mindfulness in a temporal framework. *Personality and individual differences*, 93, 112-117.
- Stoeber, J., & Rennert, D. (2008). Perfectionism in School Teachers: Relations with Stress Appraisals, Coping Styles, and Burnout. *Anxiety, Stress & Coping*, 21(1), 37-53. <http://dx.doi.org/10.1080/10615800701742461>
- Sucan, S. (2019). The Relationship between Hope and Perceived Stress in Teacher Candidates. *International Journal of Higher Education*, 8(2), 1-6.
- Tremblay, M. A., & Messervey, D. (2011). The job demands-resources model: Further evidence for the buffering effect of personal resources. *SA Journal of Industrial Psychology*, 37(2), 1-10.
- Verešová, M., & Malá, D. (2012) Stress, Proactive Coping and Self-Efficacy of Teachers. *Procedia - Social and Behavioral Sciences* 55, 294-300.
- Wentzel, K. R. (2010). Students' relationships with teachers. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 75-91). New York, NY: Routledge.