

*The role of emotional regulation ability, personality, and burnout among Spanish
teachers*

Ruth Castillo-Gualda

Camilo José Cela University

Marta Herrero and Raquel Rodríguez-Carvajal

Autonomous University of Madrid

Marc A. Brackett

Yale University

Pablo Fernández-Berrocal

University of Málaga

International Journal of Stress Management, Vol 26(2), May 2019, 146-158

Abstract

The present research aimed to gain a better understanding of the personality-burnout process by examining the effects of emotional regulation ability (ERA) through both a cross-sectional and a pre-post social and emotional learning (SEL) intervention studies. The sample was composed by 243 Spanish public school teachers. Data were collected using the Maslach Burnout Inventory-Educators Survey, the Big Five Inventory and the Mayer-Salovey-Caruso Emotional Intelligence Test. Our results indicated that ERA, significantly influences the effect of personality on burnout, particularly in its interpersonal dimension. Though, copious amounts of research have linked burnout and the Big Five personality traits, to our knowledge, this is the first study that has looked into personality roles in an SEL intervention program aimed at reducing burnout, using an ability measure to assess ERA. Considering that intra- and interpersonal emotional management is a core demand on teachers, our results show the relevance of developing intervention programs focused on social and emotional competencies.

Keywords: emotional regulation; burnout; personality; adult intervention; teachers.

Introduction

Many teachers from public schools report poor physical and mental health due to higher levels of stress and dissatisfaction while working (Aloe, Amo, & Shanahan, 2014). Teachers confront a wide variety of challenges, some of which are related to their professional roles: constantly changing educational reforms and policies, time-consuming bureaucratic workloads, and lack of organizational encouragement (Prieto, Soria, Martínez, & Schaufeli, 2008). Teachers also face challenges related to the management of students' academic and personal needs: students' challenging behavior, absenteeism, unsupportive familial environment, or poor student motivation (Chang, 2013). Educators need the ability to work despite their different daily moods, however, in order to successfully create an optimal teaching-learning experience. This continuous process of managing emotions, known as *emotional labor*, may lead teachers to a sense of satisfaction or dissatisfaction while working (Hülshager & Schewe, 2011; Kenworthy, Fay, Frame, & Petree, 2014; Yin, Lee, & Zhang, 2013). The key function that educators serve is not the mere transference of knowledge, but their role in students' engagement, achievement, and personal development (Hargreaves, 2001). What is more, emotions are noticeably present in the teaching-learning process, and, therefore, educators need to reduce, maintain, fake, or enhance their daily moods in order to conform to organizational culture and expectations of students and parents. The continuous need to deal with emotions may have an important impact in their personal and professional lives (Quinones, Rodríguez-Carvajal, Clarke, & Moreno, 2013; Yin et al., 2013). Indeed, it has been well-documented that those human-service professions that typically involve more personal interactions, caring, and support, are particularly susceptible to greater levels of work-related stress or burnout (Figueiredo-Ferraz, Grau-Alberola, Gil-Monte, & García-Jueas, 2012; Moreno-Jiménez, Gálvez, Rodríguez-

Carvajal, & Sanz, 2012a; Özer & Beycioglu, 2010). Conversely, the opposite part of the continuum would represent *job engagement*, characterized by higher levels of energy, involvement, and efficacy (Maslach, Schaufeli, & Leiter, 2001; Moreno-Jiménez, Garrosa, Corso, & Boada y Rodríguez-Carvajal, 2012b).

1.1. The Broad Impact of Teachers' Burnout

There is much evidence supporting the costs that accompany occupational stress or burnout in terms of personal, familial environments of the workers, and their organizational functioning. Prior research has pointed out the consequences for mental health, such as depression, anxiety, or negative affect (e.g., frustration, dissatisfaction, or guilt), as well as the impact on physical health (e.g., psychosomatic problems, cardiovascular disease, or musculoskeletal disorders) and higher risk of mortality among workers (Suñer-Soler et al., 2014). These effects have notable repercussions at the organizational level, such as absenteeism or reduced quality of professional performance (Schaufeli, Leiter, & Maslach, 2009; Moreno-Jiménez et al., 2012a).

Focusing on the impact among teacher population, there is much evidence supporting the influence of job-related stress (Gastaldi, Pasta, Longobardi, Prino, & Quaglia, 2015). Teachers who cope with work stress report negative self-views about their teaching, less professional commitment, more frequent absences, and less efficacy in classroom management and teaching (Aloe et al., 2014; Moreno-Jiménez et al., 2012b). Furthermore, teachers' work-related emotions influence the atmosphere that students experience in their classrooms, which has important implications on students' academic performance, motivation, and even mental health (Oberle & Schonert-Reichl, 2016; Reyes, Brackett, Rivers, White, & Salovey, 2012).

In addition, teachers' burnout affects several aspects of classroom functioning, such as positive interactions with their students, the provision of evaluative feedback,

and difficulties in creating close relationships (Travers, 2001). It seems teachers' feelings of occupational stress could negatively influence the personal resources necessary to provide student support and create a caring atmosphere that aligns with students' needs (Jennings & Greenberg, 2009). This influence has important implications for students' academic performance, motivation, risk of school failure, and psychosocial adjustment (Hamre & Pianta, 2001). The above-mentioned results concur with literature supporting the idea of emotional contagion in academic settings. The quality of interactions that teachers maintain with students may influence students' abilities to manage their own emotions. Teachers who are better able to label, validate, and display emotional regulation strategies (e.g., modify the situation, redirect attention, or conduct cognitive reappraisal) will serve as models to influence children's emotional competencies and behaviors (Eisenberg, Spinrad, & Eggum, 2010; Kurki, Järvenoja, Järvelä, & Mykkänen, 2016). Accordingly, recent research is focusing on the need to develop teachers' abilities to effectively co-regulate emotions in educational environments, in order to contribute to school success and students' optimal development.

1.2. Personality in the Experience of Burnout

Despite the inherent stressors in teaching practice, the likelihood of experiencing burnout will be determined by teachers' individual differences when interpreting and reacting to the work environment conditions. Cumulative evidence has shown which types of people might be at risk for experiencing burnout. Thus, personal characteristics may predetermine the severity of this negative experience. Teachers' personality traits, beliefs, cognitive and affective processes, and coping strategies may establish the degree of psychological symptoms related to burnout (Chang, 2013; Schaufeli, 2003). One of the constructs with more scientific support in this regard is personality. People

who experience a high level of burnout tend to have poor self-esteem, low levels of hardiness, and external locus of control (Maslach et al., 2001; Moreno-Jiménez et al., 2012b). Specifically, most research has been based on the Five-Factor personality traits, defined as five dimensions: agreeableness, conscientiousness, emotional stability, extraversion, and openness (Costa & McCrae, 1992). Based on cumulative literature, all dimensions of personality except openness have been found to be related to burnout (Alarcon, Eschleman, & Bowling, 2009). Overall, it seems more agreeable people tend to elicit optimal and kind responses from their environments, which may act as a buffer against burnout or psychological distress. Highly conscientious individuals may display more responsible answers to manipulate their work atmosphere or reduce stressful conditions, and they may receive more environmental support. On the other hand, unpleasant traits concerning affect, such as neuroticism, may predispose a worker to a severely negative job experience (Armon, Shirom, & Melamed, 2012). By contrast, assertiveness, optimism, and engagement in social activities—typical aspects in extraversion trait—may predispose a worker with those traits to have a more adaptive response to stressful situations (Swider & Zimmerman, 2010). Also deserving special mention is recent research aimed on the narrower facets of the big five dimensions and the prediction of burnout, with the aim of providing a deeper understanding of that relationship. Results—focused on agreeableness and conscientiousness—confirm the differential facets' contribution for every dimension to the overall amount of variance explained (Periard & Burns, 2014). In summary, personality trait dimensions have been widely associated as predictors of burnout among professionals, especially in educational settings.

1.3. Emotional Regulation Ability as a Buffer Against Burnout

A dimension that has demonstrated great relevance in the personality differences field is the cognitive abilities to process emotional information; these abilities falls under the umbrella of Emotional Intelligence, composed by (a) perception of emotion, (b) use of emotion to facilitate thought, (c) understanding of emotion, and (d) management of emotion. These four abilities are arranged hierarchically, with perception of emotion at the base of the model and conscious regulation of emotion at the top (Mayer & Salovey, 1997). Regarding this theoretical model, one core dimension that has received more empirical support is emotional regulation ability (ERA). This top fourth branch describes more complex emotional processes. Individuals skilled in emotion management are able to remain open to both pleasant and unpleasant emotions. They also are able to recognize the value of feeling certain emotions in specific situations, reflect about their influence and engage or detach from them according to their utility. Also, understand which short- and long-term strategies work best for enhancing or reducing particular emotions. Emotion regulation efforts benefit from developed skills on the other three branches of the Ability model of Emotional Intelligence (Mayer & Salovey, 1997). Someone with optimal strategies to cope and manage unpleasant emotions in a trigger situation, will be better able to deal with job demands. Prior evidence support the presence of ERA predict significantly higher satisfaction, well-being, and better quality of interactions, even when controlling for personality characteristics (Brackett, Rivers, & Salovey, 2011; Lopes, Salovey, Cote, & Beers, 2005). More precisely, among teachers' samples, several studies have tested different theoretical models for coping and regulating emotions in the workplace. Much evidence supports the relevant role that ERA may have in optimal perception, appraisal, and response to stressors that will finally determine effectiveness in dealing with difficult situations (Montgomery & Rupp, 2005) and stress tolerance (Lopes, Grewal,

Kadis, Gall, & Salovey, 2006). Specifically, research on teachers' burnout confirms classical theoretical models of emotion regulation (Gross & John, 2003; Lazarus & Folkman, 1987). Use of avoidance (e.g., suppression or disengagement) to regulate unpleasant emotions may facilitate feelings of stress. Therefore, these emotion-related abilities influence the effect of personality on stress management in educational settings (Saklofske, Austin, Mastoras, Beaton, & Osborne, 2012). Despite cumulative evidence supporting our understanding of ERA and the experience of burnout when controlling for personality traits, studies have mainly focused on coping style and self-regulation to manage stressful situations with self-reported measures (Chan, 2008). Hence, the conceptualization of ERA as the mental ability to process emotional information (Mayer & Salovey, 1997) makes it feasible for us to go beyond the more stable concepts, theoretically included in mixed models (e.g., motivation, optimism, stress tolerance, or coping style; Bar-On & Parker, 2000; Furnham & Petrides, 2003). Consequently, using a performance measure to identify broader emotional skills and processes that may influence the experience of stress would provide further understanding of the mechanisms that contribute to teachers' burnout.

1.4. Social and Emotional Development Among Adult Sample

An emerging area is the benefit that teachers may gain from intervention programs to promote emotion-related abilities. These interventions initiatives fall under the umbrella of social and emotional learning (SEL) interventions, understood as the promotion of self-awareness, self-management, social awareness, relation management and responsible decision making (CASEL, 2012). These abilities may have a critical effect in facilitating the teachers' personal growth, enhancing their mental adjustment, and encouraging satisfaction and commitment while teaching—all key aspects for effective teaching-learning processes. There is a need, therefore, to investigate the

possible implications and benefits that these types of interventions may have for adults (Pool & Qualter, 2012). The interventions' impact would arise not merely from benefits for students' optimal development, psychosocial adjustment, and academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011), but also the impact on teachers' outcomes. Teachers who have received training in SEL have achieved a more positive educational atmosphere for learning, higher levels of motivation in both personal and organizational interfaces, and better relationships with students and colleagues (Castillo, Fernández-Berrocal, & Brackett, 2013). As well as the promotion of emotional self-efficacy, understanding and managing emotions (Pool & Qualter, 2012). There are SEL interventions focused in active listening skills, together with empathy, self-awareness and conflict resolution techniques, that have evidenced the impact these skills may have for the whole classroom functioning (Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2013). In addition, teachers using SEL perceived better job control and efficacy and fewer job stressors (Zhai, Raver, & Li-Grining, 2011). These interventions were grounded in the four-branch model of Emotional Intelligence (Mayer & Salovey, 1997), through the enhancement of attitudes, knowledge and expertise regarding perception, understanding, use of emotions to facilitate cognitive processes, and regulating emotions. In addition, co-exists others SEL interventions for teachers targeted in Mindfulness abilities have demonstrated that those teachers who received explicit instructions on attentional focus, cognitive flexibility and emotion regulation through the promotion of "habits in mind" (Young, 2011), improve occupational health and well-being, providing teachers with resources to manage challenging situations and positive relations key factors for the creation of supportive learning environments (Roeser, Skinner, Beers, & Jennings, 2012).

It seems, the development of emotion-related competence may help to increase teacher effectiveness, foster positive emotions while working, and influence the perception of stress by providing more effective strategies (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010; Vesely, Saklofske, & Leschied, 2013). According to a recent meta-analysis, however, no studies have assessed the effectiveness of an SEL intervention in reducing the employee burnout level (Maricuțoiu, Sava, & Butta, 2016). This gap in the literature underscores the need to advance SEL training for the whole school community in the promotion of teaching and learning processes (Nathanson, Rivers, Flynn, & Brackett, 2016). In particular, much research is needed to decrease teachers' stress and promote their emotional wellness and commitment to their profession. This effort will help teachers to deal with conflict, manage unpleasant emotions, improve classroom interactions, and have greater sensitivity to students' needs. Yet, few teachers have had formal SEL training to develop their social and emotional competences, and even fewer have had SEL training in educational settings outside the United States.

In the present paper, we address the need to further understand the role of ERA in the experience of burnout, considering personality traits, in a sample of Spanish teachers (Study 1). Additionally, we aim to test the effectiveness of a SEL intervention and further investigate whether the promotion of ERA could reduce burnout experiences as well as moderate the role that personality may have in experiencing burnout (Study 2).

2. Study 1

2.1. Method

2.1.1. Participants and procedure.

A total of $N = 243$ teachers from 59 schools from Spain voluntarily agreed to participate. Contact was established through the school administrators. Teachers were

informed of the nature and purpose of the study by the researchers. From the initial sample, six teachers did not complete the measures; thus, final data are reported for 237 participants (65.4% females) who fully completed the surveys. Participants' ages ranged from 22 to 64 years ($M = 44.32$, $SD = 10.54$). Their mean tenure was 18.30 years ($SD = 12.14$). From this sample, 16% were kindergarten teachers, 41% were elementary teachers, 35% were high school teachers, and 8% were school counselors. The research study protocol was approved by the Technical Council of the Ethical Committee of the University of Málaga

2.1.2. Measures.

2.1.2.1. Burnout. The Spanish version of the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, Jackson, & Leiter, 1996) was used to assess burnout. The scale consists of 22 items rated on a 6-point scale (1 = *never*; 6 = *every day*). The questionnaire is designed to assess three aspects of burnout: *emotional exhaustion*, which reflects educators' degree of stress; *depersonalization*, which involves cognitive distancing, indifference, or cynical attitude while at work; and *personal accomplishment*, which is related to feelings of efficacy and success. In contrast to the other two subscales, higher mean scores on personal accomplishment corresponded to lower rates of burnout. Scales' reliabilities for this sample (alphas) for the full sample were: emotional exhaustion = 0.87; depersonalization = 0.60; personal accomplishment = 0.85.

2.1.2.2. Personality. Personality was measured with the Spanish version of the Big Five Inventory (BFI-44; Benet-Martinez & John, 1998). This questionnaire provides a measure of five broad dimensions of personality: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The scale

has 44 items rated on a 5-point Likert scale. Scales' reliabilities for the full sample were: 0.75; 0.70; 0.72; 0.76; and 0.80, respectively.

2.1.2.3. Emotional regulation ability (ERA). ERA was measured using the managing emotions section of the Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT Version 2.0; Mayer, Salovey, Caruso, & Sitarenios, 2003; Spanish validation, Extremera & Fernández-Berrocal, 2009). This measurement of emotional intelligence (EI) is based on responses to hypothetical actions by a person faced with different emotional tasks and situations. The measure is composed of 141 items, organized into four branches: emotion perception, emotion facilitation of thought, emotion understanding, and emotion management. In this study, we used the emotion management branch, with two subscales and 29 items, that assesses the use of strategies for regulating emotions that are effective in handling one's own emotions and those of others. Split-half reliability for the Spanish emotion management branch of the MSCEIT in this study was 0.82.

2.2. Results

Descriptive statistics, internal consistency reliability estimates, and correlations between all study variables are shown in Table 1.

2.2.1. Regression analyses. Three hierarchical multiple regression analyses were conducted with emotional exhaustion, depersonalization, and personal accomplishment, respectively, as the dependent variables. In each regression, four blocks were tested in hierarchical order to examine the incremental explanatory power of the variables in each step (Field, 2009). The variables were entered into each block of the model in the following order. After controlling for gender and tenure in Block 1 of the hierarchical regression, the five personality traits (i.e., neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience) were entered in Block 2.

Afterwards, the ERA was entered in Block 3 to test their incremental predictive validity over the personality traits. In the final step, the five interaction terms of the personality traits and the ERA were added in Block 4.

In order to test the moderations, we mean-centered the independent variables included in the regression models (Cohen, Cohen, West, & Aiken, 2003). We considered that a significant interaction effect is indicated by the hypothesis test and that there is incremental variance in the dependent variable after the interaction terms are added to the regression equation (Baron & Kenny, 1986).

Table 2 shows the results of the regressions on emotional exhaustion, depersonalization, and personal accomplishment. The results in respect of emotional exhaustion indicated that neuroticism consistently and positively predicted emotional exhaustion across all models ($\beta_{\text{Block}_2} = 0.62, p < .001$; $\beta_{\text{Block}_3} = 0.61, p < .001$; $\beta_{\text{Block}_4} = 0.62, p < .001$). Agreeableness also predicted emotional exhaustion, in the model excluding ERA ($\beta_{\text{Block}_2} = -0.32, p = .039$) and the final model ($\beta_{\text{Block}_4} = -0.35, p = .042$). There were no other significant predictors, thus, the other big five traits, the ERA, and the interactions between ERA and the different Big 5 traits showed no significant results.

The results of the regression on depersonalization indicated that gender was a significant negative predictor in all models ($\beta_{\text{Block}_1} = -0.37, p = .002$; $\beta_{\text{Block}_2} = -0.30, p = .007$; $\beta_{\text{Block}_3} = -0.22, p = .042$) but the final model ($\beta_{\text{Block}_4} = -0.21, p = .054$). Agreeableness negatively predicted depersonalization in every model ($\beta_{\text{Block}_2} = -0.39, p = .001$; $\beta_{\text{Block}_3} = -0.29, p = .012$; $\beta_{\text{Block}_4} = -0.31, p = .010$) and neuroticism showed a positive relationship in all models ($\beta_{\text{Block}_2} = 0.18, p = .031$; $\beta_{\text{Block}_3} = 0.17, p = .031$) but the final one in which the interactions were included ($\beta_{\text{Block}_4} = 0.16, p = .056$). Besides, conscientiousness negatively predicted depersonalization only before the ERA

was included ($\beta_{\text{Block}_2} = -0.22, p = .027$). Importantly, the ERA significantly and negatively predicted depersonalization ($\beta_{\text{Block}_3} = -2.69, p = .001$; $\beta_{\text{Block}_4} = -2.70, p = .004$) while the interaction between conscientiousness and ERA was a significant positive predictor of depersonalization ($\beta_{\text{Block}_4} = 2.98, p = .036$). As plotted in Figure 1, the conditional slopes indicated that ERA negatively predicted depersonalization only for low (-1SD) ($t = -6.73, p < .001, 95\% \text{ CI } [-6.51, -3.56]$) and medium values of conscientiousness ($t = -3.81, p < .001, 95\% \text{ CI } [-4.87, -1.56]$). Oppositely, ERA had no significant effect on depersonalization for high conscientiousness values (+1SD) ($t = -1.04, p < .001, 95\% \text{ CI } [-4.01, 1.24]$). None other personality trait effect or interaction effect between ERA and the personality traits was significant.

For a further understanding of the observed effects on depersonalization, we tested if the effects of agreeableness and neuroticism on depersonalization could be mediated by ERA and if this mediation effect could be moderated by the interaction effect between ERA and conscientiousness (see Figure 2). Specifically, we tested these moderated mediation effects using PROCESS following Hayes' procedure (2013). Regarding agreeableness, results indicated ERA partial mediated the effect of agreeableness on depersonalization ($-0.15, SE = .049, 95\% \text{ CI } [0.25, 0.06]$) but the moderated mediation was not significant ($0.12, SE = .067, 95\% \text{ CI } [-0.02, 0.25]$). Thus, besides the direct negative effect on depersonalization previously described, agreeableness reduces the depersonalization levels through a positive influence on ERA levels ($t = 6.99, p < .001$). Regarding neuroticism, we observed that the moderated mediation was significant ($-0.05, SE = .028, 95\% \text{ CI } [-0.12, -0.01]$). Hence, conscientiousness moderated the mediation effect of ERA on the neuroticism-depersonalization relationship. Specifically, at low (-1SD) ($-0.59, SE = .034, 95\% \text{ CI } [0.02, 0.16]$) and medium levels of conscientiousness ($-0.01, SE = .028, 95\% \text{ CI } [0.01,$

0.11]), ERA mediated the effect of neuroticism on depersonalization but this mediation effect was not significant for high conscientiousness levels (+1SD) (0.58, SE = .025, 95% CI [-0.02, 0.08]). Thus, neuroticism promotes depersonalization by its link to lower ERA levels ($t = -2.39, p = .018$) for everyone but those with high conscientiousness.

The results of the regression on personal accomplishment indicated that all five personality traits predicted personal accomplishment in at least one model. Agreeableness ($\beta_{\text{Block}_2} = 0.46, p < .001$; $\beta_{\text{Block}_3} = 0.43, p < .001$; $\beta_{\text{Block}_4} = 0.33, p = .005$), conscientiousness ($\beta_{\text{Block}_2} = 0.22, p = .026$; $\beta_{\text{Block}_3} = 0.20, p = .036$; $\beta_{\text{Block}_4} = 0.20, p = .039$), and openness to experience ($\beta_{\text{Block}_2} = 0.43, p < .001$; $\beta_{\text{Block}_3} = 0.41, p < .001$; $\beta_{\text{Block}_4} = 0.37, p < .001$) positively predicted personal accomplishment across all models. Neuroticism was a significant predictor in every model ($\beta_{\text{Block}_2} = -0.16, p = .047$; $\beta_{\text{Block}_3} = -0.16, p = .049$) but the final model ($\beta_{\text{Block}_4} = -0.14, p = .086$) while extraversion only had a significant negative effect in this last model ($\beta_{\text{Block}_4} = 0.14, p = .048$). There were no other significant main effects or interactions for personal accomplishment.

2.3. Discussion

Results indicate that neuroticism is the strongest predictor of emotional exhaustion, while agreeableness appears as the most important personality trait in explaining both, depersonalization and personal accomplishment. Besides agreeableness, openness to experience appears also as a strong predictor of personal accomplishment.

Moreover, this first study indicates that the ERA explain burnout variance over the big five personality traits highlighting its value in order to understand teacher's occupational stress. Precisely, the ERA has an incremental explanatory effect on the

prediction of depersonalization over the personality traits. The mediation and moderation effects of ERA in between the personality traits and depersonalization gives preliminary evidence of the important role of ERA in order to not only explain the teacher's burnout levels but also to modulates the personality influences on burnout.

As a resume, this first study gives initial evidence about the importance of ERA on teacher's burnout levels and how these abilities influence the effect of the big five personality traits on this occupational stress. As a next step to get greater insight into causality, the second study analyzes the potency of a 3-months SEL intervention to reduce burnout and how this effect may change the role of the big five personality traits in this burnout process.

3. Study 2

3.1. Method

3.1.1. Participants. Participants were 59 teachers randomly selected from the general sample. This random sample was composed of 20 males and 39 females. Their mean tenure was 12.35 years ($SD = 9.62$). Their ages ranged from 22 to 59 years ($M = 41.12$, $SD = 9.91$). Of the 59 participants, 17% were kindergarten teachers, 27% were elementary teachers, 41% were high school teachers, and 15% were school counselors. From this sample, there were 36 participants ($n = 36$) who voluntarily decided to participate in a SEL intervention. Participants received a proposal of several teacher training courses officially designed to provide them extracurricular formal training and give them extra points to promote their professional career. Teachers voluntarily decided to participate in the SEL training. The mean age of the volunteers was 39.47 years ($SD = 10.12$) with 30.6% males and 69.4% females. The rest ($n = 23$) served as the control group. The mean age of the control group was 43.70 years ($SD = 9.22$) with 39.1% males and 60.9% females. There were no significant gender ($\chi^2 [1] = 0.46$, $p =$

.578) or age differences between both groups ($t[57] = 1.62, p = .111$). The research study protocol was approved by the Technical Council of the Ethical Committee of the University of Málaga.

3.1.2. Procedure. This study used a pretest-posttest design, extended over 3 months. At one point in time, all participants from the SEL and comparison groups provided sociodemographic information and baseline data during a 1-hour session. Posttest data were collected in another 1-hour session after approximately six months.

3.1.3. Measures. Measures used in Study 2 have been described earlier.

3.1.4. Intervention. The SEL intervention was based on a body of research supporting the role of emotional competence in psychological, social, and professional functioning (Mayer, Roberts, & Barsade, 2008). The SEL intervention was grounded in the four-branch theoretical model of EI, conceptualized as:

“(1) accurate perception, appraisal, and expression of emotions; (2) awareness of feelings and ability to generate emotions to facilitate thought; (3) understanding of emotions including the ability to label them with a rich emotional vocabulary; (4) regulation of emotions in order to promote emotional and intellectual growth” (Mayer & Salovey, 1997).

Specifically, the SEL training was based on a guide for the development of emotional competencies for an effective teaching practice conceptualized in 5 key skills known under the acronym of RULER, understood as a set of skill to **Recognize** emotions to obtain valuable information about the environment; **Understand** the causes and consequences of your own and your students’ emotions to predict behavior; **Label** emotions to describe feelings precisely and accurately with a full range of feeling words; **Express** emotions to communicate messages appropriately and according to context and **Regulate** your own and your students’ emotions to harness their

constructive power. RULER is an approach meant to be universal and preventative in nature. It helps students and teachers be more aware of their emotions, and provides tools to deal with the full range of pleasant and unpleasant emotions we all experience. It provides a framework for harnessing the power of emotions and enhancing our attitudes and mindset about the role of emotions, the knowledge or information we have and can glean from our emotions, and the skill with which we can attend to and manage emotions. The main goal is for this Approach is create environments where emotional intelligence is valued across the whole school community. The emphasis in emotional intelligence is that these five skills can be learned, trained or enhanced. For a recent revision, description of theory of change, tools and evidence (see, Nathanson, Rivers, Flynn, & Brackett, 2016).

Teachers received a training extended across 3 months. The training was composed of 30 hours (i.e., 24 in-person trainings and 6 hours of personal work), held across eight meetings, consisting of 3-hour sessions.

3.2. Results

Descriptive statistics, internal consistency reliability estimates, and correlations between Study 2 variables are shown in Table 3.

3.2.1. Analyses of variance (ANOVAs). We carried out three independent ANOVAs with the values of emotional exhaustion, depersonalization, and personal accomplishment after the intervention period as dependent variables. In order to observe the postintervention differences due to the intervention effect, the intervention group was included as a factor (i.e., 0 = control group; 1 = intervention group). As well, the respective preintervention values of each dependent variable (i.e., emotional exhaustion, depersonalization, or personal accomplishment) were included as covariates.

The results concerning emotional exhaustion indicated no significant differences between the intervention group ($M = 1.70$, $SD = 0.94$) and the control group ($M = 1.63$, $SD = 1.17$) ($F[1] = 0.40$, $p = .528$, partial $\eta^2 < .01$). As well, there were no significant differences, but a tendency between, the intervention group ($M = 0.34$, $SD = 0.42$) and the control group ($M = 0.76$, $SD = 0.93$) ($F[1] = 3.55$, $p = .065$, partial $\eta^2 = .06$) in depersonalization. Regarding personal accomplishment, participants in the intervention group ($M = 5.09$, $SD = 0.57$) showed significantly higher levels than the control group ($M = 4.86$, $SD = 0.71$) ($F[1] = 6.55$, $p = .013$, partial $\eta^2 = .11$) after the intervention.

3.2.2. Regression analyses. Three hierarchical multiple regression analyses were conducted with emotional exhaustion, depersonalization, and personal accomplishment after the intervention, respectively, as the dependent variables. In performing the regressions and testing the moderations, we followed the same procedure as in Study 1, but the four blocks differed by the variables included. Given the small sample size, we selected the personality traits that significantly predicted the burnout dimensions in the final models of Study 1. In doing so, we maximized the degrees of freedom while keeping the thumb rule of $n > 50 +$ the number of predictors (Harris, 1975) to carry on the multiple regressions. In Block 1, we included the respective preintervention values of each dependent variable (i.e., emotional exhaustion, depersonalization, or personal accomplishment) as controls. In Block 2, we entered the selected personality traits (i.e., agreeableness and neuroticism were entered in predicting emotional exhaustion; agreeableness, neuroticism and conscientiousness in predicting depersonalization; and extraversion, agreeableness, conscientiousness, and openness to experience were included in predicting personal accomplishment). In Block 3, we included the intervention group (i.e., 0 = control group; 1 = ERA intervention). Finally,

in Block 4, we included the interactions between the ERA intervention and each of the personality traits entered in Block 2.

The results of the regression performed on emotional exhaustion are displayed in Table 4. The preintervention levels of emotional exhaustion significantly predicted the emotional exhaustion levels after the intervention in all models ($\beta_{\text{Block}_1} = 0.81, p < .001$; $\beta_{\text{Block}_2} = 0.76, p < .001$; $\beta_{\text{Block}_3} = 0.76, p < .001$; $\beta_{\text{Block}_4} = 0.77, p < .001$). Besides the preintervention levels, only agreeableness had a significant negative effect on the postintervention levels of emotional exhaustion in all models ($\beta_{\text{Block}_2} = -0.49, p = .018$; $\beta_{\text{Block}_3} = -0.48, p = .020$) but the final model ($\beta_{\text{Block}_4} = -0.28, p = .348$). No other direct (i.e. neuroticism or intervention group effects) or interaction effect was significant.

As shown in Table 4, the regression performed on depersonalization indicated that the preintervention depersonalization levels were a significant predictor in the models prior to the intervention group inclusion ($\beta_{\text{Block}_1} = 0.56, p = .003$; $\beta_{\text{Block}_2} = 0.39, p = .039$) but not afterwards ($\beta_{\text{Block}_3} = 0.32, p = .090$; $\beta_{\text{Block}_4} = 0.28, p = .117$). Agreeableness negatively predicted the after-intervention depersonalization levels ($\beta_{\text{Block}_2} = -0.48, p = .024$; $\beta_{\text{Block}_3} = -0.50, p = .015$; $\beta_{\text{Block}_4} = -0.94, p = .001$). Notably, the intervention group showed a significant relationship with depersonalization, so those people who were in the intervention group had lower levels of depersonalization after the intervention than did those in the control group ($\beta_{\text{Block}_3} = -0.35, p = .038$; $\beta_{\text{Block}_4} = -0.35, p = .029$). Moreover, the final model indicated a significant positive interaction between agreeableness and the intervention group in predicting depersonalization ($\beta_{\text{Block}_4} = 0.83, p = .024$). As observed in Figure 3, the simple slopes were significantly different ($t[55] = 2.02, p = .049$). Specifically, the negative relationship between agreeableness and depersonalization was significant for the control group ($t[55] = -6.60,$

$p < .001$), whereas it did not differ significantly from zero for those in the intervention group ($t[55] = -0.87, p = .388$). No other direct or interaction effect was significant.

The regression results of the predictors of personal accomplishment are also shown in Table 4. The baseline levels of personal accomplishment were a significant predictor in every model ($\beta_{\text{Block}_1} = 0.52, p < .001$; $\beta_{\text{Block}_2} = 0.50, p < .001$; $\beta_{\text{Block}_3} = 0.54, p < .001$; $\beta_{\text{Block}_4} = 0.57, p < .001$). Beside this, only the intervention group showed a significant positive relationship in the third model in such a way that those in the intervention group showed higher levels of personal accomplishment after the intervention period ($\beta_{\text{Block}_3} = 0.33, p = .019$). None of the other direct (i.e. extraversion, agreeableness, conscientiousness, or openness to experience) or interaction effects was significant.

3.3. Discussion

The results of this second study highlight that the SEL intervention is effective to reduce teacher's burnout. Specifically, the SEL intervention appears to be effective on the prevention of teacher's depersonalization and the promotion of personal accomplishment.

Regarding the big five-personality traits, only agreeableness seems to explain changes after the intervention period on burnout levels. Precisely, people with higher agreeableness are able to reduce emotional exhaustion and depersonalization along time. Besides, it is important to notice that the reductive effect of agreeableness on depersonalization only is significant for people in the intervention group. Thus, the SEL intervention appears as a training tool able to reduce depersonalization despite the agreeableness trait levels.

General Discussion

The objective of this study was to gain a better understanding of the personality burnout process by examining the effects of ERA through both a cross-sectional and pre-post intervention designs, using a sample of Spanish public school teachers. Our research advanced the knowledge of the mechanisms that account for the prevention of occupational stress, given its high prevalence among those in the teaching profession (Aloe et al., 2014). Empirical research has indicated that personality predicts burnout (Swider & Zimmerman, 2010), and ERA significantly influences the effect of personality on stress, particularly in educational settings (Saklofske et al., 2012).

Consistently in Study 1 and 2, the presence and promotion of ERA, respectively, appear as clue resources to reduce burnout. In line with prior research (Montgomery & Rupp, 2005; Lopes, et al., 2006), ERA help teachers to lead with occupational emotional situations that may lead to stress. More importantly, despite the multitude of research studies focusing on the negative variables associated with burnout, none of them were focused on SEL-based intervention programs (Maricuțoiu et al., 2016). We, therefore, examined the reduction of teachers' burnout using an SEL scientifically-based intervention with a quasi-experimental design. We found that teachers who participated in the training benefited from this intervention with significant improvements in the positive dimension of MBI. Thus, by both studies, we could observe not only the power of the ERA in reducing burnout but a training method for the promotion of this process.

Regarding the ERA relationship with each burnout characteristic, we observed in Study 1 that the ERA had a significant negative relationship with depersonalization. In Study 2, the SEL-based intervention had also a negative effect on depersonalization and a positive one on personal accomplishment. Nevertheless, no effect was found on emotional exhaustion in any of both studies. In this regard, although some researchers

found that exhaustion is the easiest factor to be changed through intervention, programs based on enhancement of interpersonal skills have almost no impact on exhaustion and this effect is homogeneous across studies (Maricuțoiu et al., 2016). Perhaps the SEL interventions's focus on the social emotional learning might more easily modify the positive dimension of burnout, personal accomplishment, and the interpersonal nature of the depersonalization dimension, according to prior evidence ($d = 0.27$, $Z = 2.67$, $p = .01$; Maricuțoiu et al., 2016). In fact, ERA appear as consistent significant predictors only in the depersonalization dimension. Cynicism or depersonalization describes the process by which individuals distance themselves from the role recipient and depersonalize the latter to cut down the effort required by these interactions. This dimension represents the interpersonal core component of the syndrome, so the lack of ERA may play a key role in the development of this dimension. The literature has also emphasized the energy-draining consequences of failing to regulate emotions, leading to the perception that interactions are invariably stressful (Hülshager & Schewe, 2011; Yin et al., 2013).

Besides the ERA effects, we also found a regular negative effect of agreeableness on burnout in both studies. Previous evidence has found a consistent link between agreeableness and burnout (Alarcon et al., 2009), which underscores the interpersonal nature of burnout syndrome. In Study 1 we observed that the reductive effect of agreeableness on depersonalization was partial explained because agreeableness was linked to higher ERA which in turn led to less depersonalization. Parallel in Study 2, we found an interaction effect of levels of agreeableness on benefits of SEL intervention on depersonalization. Teachers who reported higher levels of agreeableness obtained lower levels of depersonalization, regardless of whether they

belonged to the SEL intervention group or not (floor effect), but low agreeableness teachers benefited more from SEL intervention, significantly reducing levels of depersonalization. More agreeable people tend to show kind, humble, tender-mindedness interactions, and—most importantly—the tendency to tell the truth; therefore, less agreeable people tend to show inauthentic displays that will result in more stressful interactions, known as interpersonal emotional labor (Kenworthy et al., 2014), which concur with our study predicting the main interpersonal dimension of burnout, depersonalization. On the contrary, acting genuinely—as more agreeable people do—directly prevents burnout, since it generates opportunities for employees to develop valued resources in a less stressful process (Quinones, Rodríguez-Carvajal, & Griffiths, 2016).

The evidence accumulated supports a strong association between exhaustion and depersonalization, also corroborated in our study, since the main personality traits which predict for both burnout dimensions are the same in each study (i.e., agreeableness and neuroticism in Study 1 and agreeableness in Study 2). However, all personality factors significantly predicted personal accomplishment, except for neuroticism. Personality predictors of emotional exhaustion and depersonalization are, therefore, qualitatively different from the predictors of personal accomplishment.

Besides the described consistencies between studies, we also found inconsistencies regarding the personality trait effects when Study 1 and Study 2 are compared which increase the importance of paying attention to the intervention effects which novelty is included in this research. Regarding neuroticism, in Study 1 we found that this trait accounts for the highest beta coefficient on emotional exhaustion which results concur with prior research (Armon et al., 2012). However, this result is not observed in the second study when the changes in burnout after the SEL-intervention

are observed. As other authors have previously stated (Lopes et al., 2005), this may be explained because the promotion of ERA might impact more on agreeableness than on neuroticism given that the dispositional affective reactivity linked to neuroticism. Parallel, we also observed a moderation effect of consciousness on the ERA relationship with depersonalization in Study 1 but not in the effects of the SEL-based intervention in Study 2. Thus, while the ERA is observed as generally important for those who are low responsible, the SEL-intervention may promote changes in the strategies linked to higher interpersonal emotional skills (Talvio, et al., 2013) which are deeper linked to high levels of agreeableness than to responsibility or emotional reactivity.

We observed also substantial differences between studies on openness to experience and extraversion effects on personal accomplishment. As expected, extraversion was linked in Study 1 to higher personal accomplishment but openness to experience had a surprising positive effect on this burnout characteristic. At this regard, previous studies with teachers have observed this positive effect of openness in educational setting which may indicate that this characteristic is valuable for personal accomplishment in this context (Kokkinos, 2007). Nevertheless, openness to experience and extraversion are positively related to personal accomplishment in the transversal study but not in the intervention one where only to be in the training group is a positive predictor of personal accomplishment. Similar to the prior argumentation, the differences between studies may be linked to the focus of the SEL intervention on ERA which differs from the behavioral tendencies under the traits. Thus, the changes on personal accomplishment are expected to be linked to the focus goals of the training of adequate ERA which do not imply, for example, to increase the prone to social interactions or to look for new experiences.

The findings reported here raise a number of important questions for future research. One important avenue would focus on teacher-student interactions. For example, researchers might attempt to identify other personal and interpersonal characteristics that prevent a teacher with a lack of ERA from suffering burnout. Those characteristics might include positive psychological capital, self-regulation processes, and psychological flexibility, among others, which provide teachers with more resources to handle these interactions effectively. An examination of a multimethod research approach is another important avenue for future research. For example, one could examine the feedback loop of the teacher's emotional management and self-regulation processes, analyzing their impacts on colleagues and students, and how their reaction affects the teacher's burnout in a feedback loop process. Other interpersonal variables, such as rapport effects, may also be included in future research for deeper insight into crossover effects of handling difficult interactions, not only on job outcomes, but also on physical and psychological outcomes.

Some limitations of these studies should be noted. A first limitation is the small number of participants in our second study. Even if the number of predictors and participants is adequate for the regression analyses performed (Harris, 1975), larger samples may help to rule out the possibility of masked significant relationships which could be otherwise obscured in small samples. In this line, a larger sample could also include a balanced gender representation in order to check possible gender differences. In our data, gender is not a significant predictor in any final model but appears as such in some of the first depersonalization models so the role of gender differences may be checked in future studies. A second limitation is that in Study 2, groups were not randomly assigned to the intervention or control conditions, but instead those in the intervention condition volunteered for the training. We acknowledge this is a major

limitation of the study as we don't truly know if there are other factors that differentiate the treatment from the control group, we recommend future studies use random assigned designs to test the effectiveness of SEL intervention among adult samples. A third limitation is that we have only provided data related to the emotion management branch (ERA). Future studies should analyze the role that emotion perception or emotion understanding, among other abilities, may have as relevant emotion-related skills of personality- burnout process. Nevertheless, ERA has been widely assumed to be the most reliability predictability factor in teachers' burnout (Brackett et al., 2010). Another methodological limitation is linked to the measurement point of the independent and dependent variables. In the first study, the transversal design does not allow us to assure the causal relationship between the independent and the dependent variables.

Nevertheless, the background literature on personality traits (Swider & Zimmerman, 2010), and the quasi-experimental design of the second study, support the proposed causal relationships. Finally, another limitation of the study is the effect of potential biases from the common methods variance in the self-report measures used to assess burnout. The existence of common methods variance generally distorts results by inflating correlations among measures. When the reliability of measures is adequate, however, true interaction effects are not obscured by the common methods variance. Despite this, an important contribution of this research is ERA as reported by an ability measure, such as MSCEIT.

Copious amounts of research have linked burnout and the Big Five personality traits (Alarcon et al., 2009); however, to our knowledge, this is the first study that has looked into personality roles in an SEL intervention program aimed at reducing burnout, using an ability measure to assess ERA. Considering that intra- and interpersonal emotional management is a core demand on teachers, our results show the relevance of

developing intervention programs focused on social and emotional competencies. Specifically, those SEL initiatives targeted for the whole school community, including teachers and stakeholder, as RULER approach, helps educators to understand the impact that emotions could have in cognitive process, decision-making and responses to challenging scenarios, as well as provide tool and guides to create a supportive learning environment, key aspect that may act as a buffer to dispositional and stables responses, such as personality characteristics, to stress in academic settings. In addition, the training among educators, would help to a better infuse of socio-emotional competences across the whole school community providing a common language and optimal learning environments where these effects likely occur. These findings jointly also provide important insights into the personality-burnout process among teachers.

References

- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & stress, 23*(3), 244-263. doi:10.1080/02678370903282600
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review, 26*(1), 101-126. doi:10.1007/s10648-013-9244-0
- Armon, G., Shirom, A., Melamed, S. (2012). The big five personality factors as predictors of changes across time in burnout and its facets. *Journal of Personality, 80*(2), 403-427.
- Bar-On, R., & Parker, J. D. A. (Eds.). (2000). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. San Francisco, CA: Jossey-Bass.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173.
- Benet-Martínez, V., & John, O. P. (1998). Los cinco grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the big five in spanish and english. *Journal of Personality and Social Psychology, 75*(3), 729-750.
<http://dx.doi.org/10.1037/0022-3514.75.3.729>
- Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools, 47*(4), 406-417.
doi:10.1002/pits.20478
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and*

Personality Psychology Compass, 5(1), 88-103. doi:10.1111/j.1751-9004.2010.00334.x

- Castillo, R., Fernández-Berrocal, P., & Brackett, M. A. (2013). Enhancing teacher effectiveness in Spain: A pilot study of the RULER approach to social and emotional learning. *Journal of Education and Training Studies*, 1(2), 263-272. doi:10.11114/jets.v1i2.203
- Chan, D. W. (2008). Emotional intelligence, self-efficacy, and coping among Chinese prospective and in-service teachers in Hong Kong. *Educational Psychology*, 28(4), 397-408. doi:10.1080/01443410701668372
- Chang, M.-L. (2013). Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation and coping. *Motivation and Emotion*, 37(4), 799-817. doi: 10.1007/s11031-012-9335-0
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression and correlation for the behavioral sciences (3rd ed.)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Collaborative for academic, social and emotional learning (2012). Implementation overview. Retrieved from <http://www.casel.org/implement/index.php>.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4(1), 5. doi:10.1037/1040-3590.4.1.5
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x

- Eisenberg, N., Spinrad, T. L., & Eggum, N. D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual review of clinical psychology, 6*, 495. doi:10.1146/annurev.clinpsy.121208.131208
- Extremera, N., & Fernández-Berrocal, P. (2009). *MSCEIT, Test de Inteligencia Emocional de Mayer-Salovey-Caruso*. Madrid, Spain: TEA Ediciones.
- Extremera, N., Fernández-Berrocal, P., & Salovey, P. (2006). Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Version 2.0: reliabilities, age and gender differences. *Psicothema, 18*, 42–48.
- Field, A. (2009). *Discovering statistics using SPSS (3rd edition)*. London (UK): SAGE Publications.
- Figueiredo-Ferraz, H., Grau-Alberola, E., Gil-Monte, P. R., & García-Juesas, J. A. (2012). [Burnout and job satisfaction among nursing professionals]. *Psicothema, 24*(2), 271-276.
- Furnham, A., & Petrides, K. V. (2003). Trait emotional intelligence and happiness. *Social Behavior and Personality, 31*(8), 815-824.
doi:10.2224/sbp.2003.31.8.815
- Gastaldi, F. G. M., Pasta, T., Longobardi, C., Prino, L. E., & Quaglia, R. (2015). Measuring the influence of stress and burnout in teacher-child relationship. *European Journal of Education and Psychology, 7*(1).
doi:10.1989/ejep.v7i1.149
- Ghorpade, Jai., Lackritz, Jim., Singh, G. (2011). Personality as a moderator of the relationship between role conflict, role ambiguity, and burnout. *Journal of Applied Social Psychology, 41*(6), 1275-1298.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of*

- Personality and Social Psychology*, 85(2), 348-362. doi:10.1037/0022-3514.85.2.348
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638. doi:10.1111/1467-8624.00301
- Hargreaves, A. (2001). Emotional geographies of teaching. *Teachers college record*, 103(6), 1056-1080.
- Harris, R. J. (1975). *A primer of multivariate statistics*. New York: Academic.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guildford Press.
- Hülshager, U. R., Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 16, 361–389. <http://dx.doi.org/10.1037/a0022876>
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491-525.
doi:10.3102/0034654308325693
- Kenworthy, J., Fay, C., Frame, M., Petree, R. (2014). A meta-analytic review of the relationship between emotional dissonance and emotional exhaustion. *Journal of Applied Social Psychology*, 44, 94–105. <http://dx.doi.org/10.1111/jasp.12211>.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77(1), 229-243.
<http://dx.doi.org/10.1348/000709905/x90344>
- Kurki, K., Järvenoja, H., Järvelä, S., & Mykkänen, A. (2016). How teachers co-regulate children’s emotions and behaviour in socio-emotionally challenging situations in

day-care settings. *International Journal of Educational Research*, 76, 76-88.

doi:10.1016/j.ijer.2016.02.002

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141-169.

doi:10.1002/per.2410010304

Lopes, P. N., Grewal, D., Kadis, J., Gall, M., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema*, 18, suppl, 132-138.

Lopes, P. N., Salovey, P., Cote, S., & Beers, M. (2005). Emotion regulation abilities and the quality of social interaction. *Emotion*, 5(1), 113-118. doi:10.1037/1528-3542.5.1.113

Maricuțoiu, L.P., Sava, F.A., Butta, O. (2016). The effectiveness of controlled interventions on employees' burnout: A meta-analysis. *Journal of Occupational and Organizational Psychology*, 89, 1-27.

Maslach, C., Jackson, S., & Leiter, M. P. (1996). Maslach Burnout Inventory (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. doi:10.1146/annurev.psych.52.1.397

Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human Abilities: Emotional Intelligence. *Annual Review of Psychology*, 59, 507-36.

doi:10.1146/annurev.psych.59.103006.093646

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-34). New York, NY: Basic Books, Inc.

- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*, 97–105. doi:10.1037/1528-3542.3.1.97
- Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education/Revue canadienne de l'éducation, 458-486*. doi:10.2307/4126479
- Moreno-Jiménez, B. Gálvez, M. Rodríguez-Carvajal, R. Sanz, A.I. (2012a). A study of physicians' intention to quit: The role of burnout, commitment and difficult doctor-patient interactions. *Psicothema, 24(2)*, 263-270.
- Moreno-Jiménez, B., Garrosa, E., Corso, S., Boada, M., Rodríguez-Carvajal, R. (2012b). Hardy personality and psychological capital: The positive personal variables and the processes of exhaustion and vigor. *Psicothema, 24(1)*, 79-86.
- Nathanson, L., Rivers, S. E., Flynn, L. M., & Brackett, M. A. (2016). Creating emotionally intelligent schools with RULER. *Emotion Review, 1754073916650495*. doi:10.1177/1754073916650495
- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine, 159*, 30-37. doi:10.1016/j.socscimed.2016.04.031
- Özer, N., & Beycioglu, K. (2010). The relationship between teacher professional development and burnout. *Procedia-Social and Behavioral Sciences, 2(2)*, 4928-4932. doi:10.1016/j.sbspro.2010.03.797
- Periard, D. A., & Burns, G. N. (2014). The relative importance of Big Five Facets in the prediction of emotional exhaustion. *Personality and Individual Differences, 63*, 1-5. doi:10.1016/j.paid.2014.01.036

Pool, L. D., & Qualter, P. (2012). Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning and Individual Differences, 22*(3), 306-312. doi:10.1016/j.lindif.2012.01.010

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437-448

- Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. (2008). Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema, 20*(3), 354-360.
- Quinones, C., Rodríguez-Carvajal, R., Clarke, N. Moreno, B. (2013). Development and cross-national validation of the Emotional Effort Scale (EEF). *Psicothema, 25*(3), 363-369.
- Quinones, C., Rodríguez-Carvajal, R., Griffiths, M. (2016). Testing a eustress-distress emotion regulation model in British and Spanish front-line employees. *International Journal of Stress Management*.
<http://dx.doi.org/10.1037/str0000021>
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology, 104*(3), 700. doi:10.1037/a0027268
- Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives, 6*(2), 167-173. doi:10.1111/j.1750-8606.2012.00238.x
- Saklofske, D. H., Austin, E. J., Mastoras, S. M., Beaton, L., & Osborne, S. E. (2012). Relationships of personality, affect, emotional intelligence and coping with student stress and academic success: Different patterns of association for stress and success. *Learning and Individual Differences, 22*(2), 251-257.
doi:10.1016/j.lindif.2011.02.010
- Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *SA Journal of Industrial Psychology, 29*(4). doi:10.4102/sajip.v29i4.127

- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International, 14*(3), 204-220.
doi:10.1108/13620430910966406
- Suñer-Soler, R., Grau-Martín, A., Flichtentrei, D., Prats, M., Braga, F., Font-Mayolas, S., & Gras, M. E. (2014). The consequences of burnout syndrome among healthcare professionals in Spain and Spanish speaking Latin American countries. *Burnout Research, 1*(2), 82-89. doi:10.1016/j.burn.2014.07.004
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior, 76*(3), 487-506. doi:10.1016/j.jvb.2010.01.003
- Talvio, M., Lonka, K., Komulainen, E., Kuusela, M., & Lintunen, T. (2013). Revisiting Gordon's Teacher Effectiveness Training: An intervention study on teachers' social and emotional learning. *Electronic Journal of Research in Educational Psychology, 11*(3), 693-716. doi:10.14204/ejrep.31.13073
- Travers, C. J. (2001). Stress in teaching: Past, present, and future. In J. Dunham (Ed.), *Stress in the workplace*. Philadelphia, PA: Whurr Publishers, Ltd.
- Vesely, A. K., Saklofske, D. H., & Leschied, A. D. (2013). Teachers—The Vital Resource The Contribution of Emotional Intelligence to Teacher Efficacy and Well-Being. *Canadian Journal of School Psychology, 28*(1), 71-89.
doi:10.1177/0829573512468855
- Yin, H.-b., Lee, J. C. K., & Zhang, Z.-h. (2013). Exploring the relationship among teachers' emotional intelligence, emotional labor strategies and teaching satisfaction. *Teaching and Teacher Education, 35*, 137-145.
doi:10.1016/j.tate.2013.06.006

Young, S. N. (2011). Biologic effects of mindfulness meditation: growing insights into neurobiologic aspects of the prevention of depression. *Journal of psychiatry & neuroscience: JPN*, 36(2), 75. doi:10.1503/jpn.110010

Zhai, F., Raver, C. C., & Li-Grining, C. (2011). Classroom-based interventions and teachers' perceived job stressors and confidence: Evidence from a randomized trial in Head Start settings. *Early Childhood Research Quarterly*, 26(4), 442-452. doi:10.1016/j.ecresq.2011.03.003

Table 1.

Descriptive Statistics, Internal Consistency Reliability Estimates, and Correlations between Study 1 Variables

Variable	M	SD	Correlations									
			1	2	3	4	5	6	7	8	9	
1. Emotional exhaustion	1.92	1.18	1									
2. Depersonalization	0.79	0.88	.45***	1								
3. Personal accomplishment	4.70	0.92	-.37***	-.52***	1							
4. Extraversion	3.41	0.72	-.23***	-.16*	.32***	1						
5. Agreeableness	4.05	0.57	-.31***	-.43***	.51***	.25***	1					
6. Conscientiousness	3.84	0.59	-.20**	-.35***	.38***	.23***	.47***	1				
7. Neuroticism	2.61	0.67	.43***	.23***	-.25***	-.18**	-.34***	-.10	1			
8. Openness to experience	3.82	0.62	-.05	-.23***	.44***	.34***	.31***	.16*	-.04	1		
9. Emotion regulation abilities	0.38	0.07	-.20**	-.46***	.37***	.18**	.44***	.34***	-.12	.29***	1	

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

Table 2.

Regression Results for Emotional Exhaustion, Depersonalization, and Personal Accomplishment in Study 1 (N = 237)

Predictors	Emotional Exhaustion				Depersonalization				Personal Accomplishment			
	Block 1	Block 2	Block 3	Block 4	Block 1	Block 2	Block 3	Block 4	Block 1	Block 2	Block 3	Block 4
	β	β	β	β	β	β	β	β	β	β	β	β
Block 1												
Gender	-0.01	-0.06	-0.04	-0.05	-0.37**	-0.30**	-0.22*	-0.21	0.22	0.13	0.10	0.05
Tenure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
Block 2												
Extraversion		-0.19	-0.19	-0.19		0.04	0.04	0.04		0.10	0.10	0.14*
Agreeableness		-0.32*	-0.30	-0.35*		-0.39**	-0.29*	-0.31*		0.46***	0.43***	0.33**
Conscientiousness		-0.09	-0.08	-0.05		-0.22*	-0.18	-0.16		0.22*	0.20*	0.20*
Neuroticism		0.62***	0.61***	0.62***		0.18*	0.17*	0.16		-0.16*	-0.16*	-0.14
Openness		0.15	0.16	0.14		-0.14	-0.09	-0.06		0.43***	0.41***	0.37***
Block 3												
Ability ER (Ability Emotion Regulation)			-0.66	-0.89			-2.69**	-2.70**			0.91	-0.29
Block 4												
Extraversion x ERA				1.66				-1.20				0.06
Agreeableness x ERA				-1.59				-2.37				-2.61
Conscientiousness x ERA				-0.79				2.98*				-0.51
Neuroticism x ERA				-0.73				-0.17				-1.25
Openness x ERA				0.51				2.22				-2.13
R ²	< .01	.23	.23	.24	.04	.24	.28	.30	.02	.38	.39	.43
R ² change	< .01	.23	< .01	.01	.04	.20	.04	.02	.02	.37	< .01	.04

Note. Openness = Openness to experience; AER = Ability Emotional Regulation; β = Unstandardized regression coefficient.

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

Table 3.

Descriptive Statistics, Internal Consistency Reliability Estimates, and Correlations between Study 2 Variables

Variable	M	SD	Correlations												
			1	2	3	4	5	6	7	8	9	10	11		
1. Emotional exhaustion T1	1.62	1.02	1												
2. Depersonalization T1	0.45	0.48	.40**	1											
3. Personal accomplishment T1	4.99	0.74	-.27*	-.10	1										
4. Emotional exhaustion T2	1.67	1.03	.80***	.45***	-.32*	1									
5. Depersonalization T2	0.50	0.69	.38**	.39**	-.04	.50***	1								
6. Personal accomplishment T2	5.00	0.63	-.20	-.23	.61***	-.26*	-.24	1							
7. Extraversion	3.57	0.65	.11	.03	.29*	.05	.04	.17	1						
8. Agreeableness	4.28	0.43	-.24	-.39**	.36**	-.38**	-.40**	.27*	.21	1					
9. Conscientiousness	3.91	0.54	-.19	-.13	.21	-.02	.03	.14	.21	.14	1				
10. Neuroticism	2.46	0.73	.34**	.28*	-.40**	.32*	.11	-.29*	-.07	-.37**	-.01	1			
11. Openness to experience	3.97	0.62	-.03	-.18	.20	-.07	-.15	.17	.35**	.12	-.06	-.02	1		

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

Table 4.

Regression Results for Emotional Exhaustion, Depersonalization, and Personal Accomplishment in Study 2 (N = 59)

Predictors	Emotional Exhaustion				Depersonalization				Personal Accomplishment			
	Block 1	Block 2	Block 3	Block 4	Block 1	Block 2	Block 3	Block 4	Block 1	Block 2	Block 3	Block 4
	β	β	β	β	β	β	β	β	β	β	β	β
Block 1												
T1 DV	0.81***	0.76** *	0.76** *	0.77** *	0.56**	0.43*	0.36	0.35	0.52** *	0.50** *	0.54** *	0.57** *
Block 2												
Extraversion									-0.04	-0.02	0.19	
Agreeableness		-0.49*	-0.48*	-0.28		-0.54*	-0.60**	-1.03**	0.09	0.07	0.18	
Conscientiousness						0.14	0.17	0.51	0.02	-0.01	-0.13	
Neuroticism		-0.01	< 0.01	0.08		-0.09	-0.12	< 0.01				
Openness							-0.38*		0.07	0.05	-0.15	
Block 3												
Group ERA			0.11	0.12			-0.35*	-0.39*			0.33*	0.34
Block 4												
Extraversion x Group												-0.36
Agreeableness x Group				-0.37								-0.17
Conscientiousness x Group												0.18
Neuroticism x Group				-0.14								
Openness x Group												0.37
R ²	.64	.68	.68	.68	.15	.24	.31	.43	.37	.38	.44	.49
R ² change	.64	.04	< .01	< .01	.15	.09	.07	.12	.37	.01	.06	.04

Note. T1 DV = Values before the intervention of each dependent variable; Openness = Openness to experience; Group = Intervention (value = 1) or control group (value = 0); β = Unstandardized regression coefficient.

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

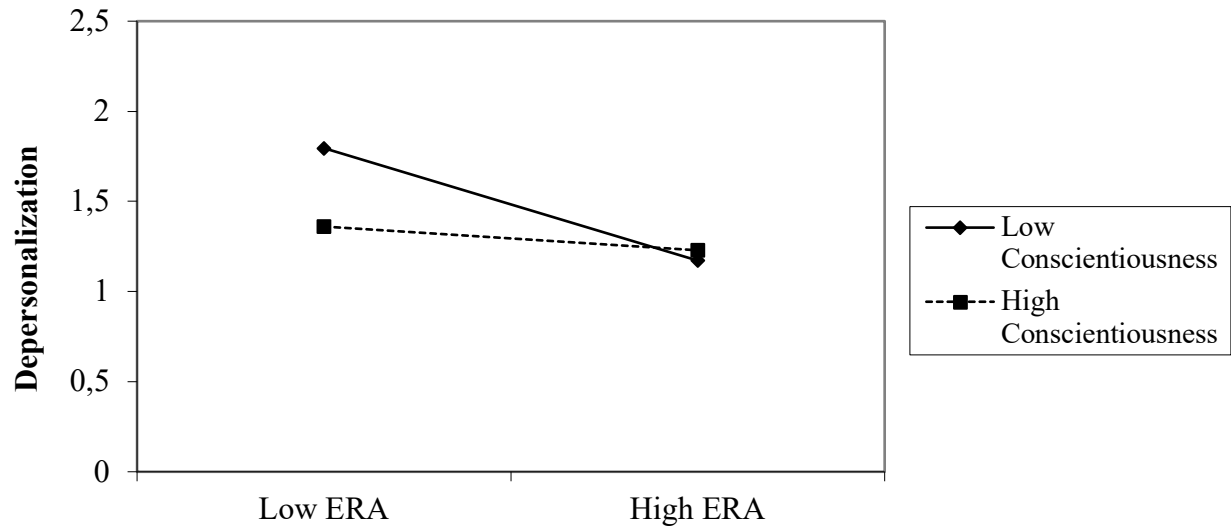
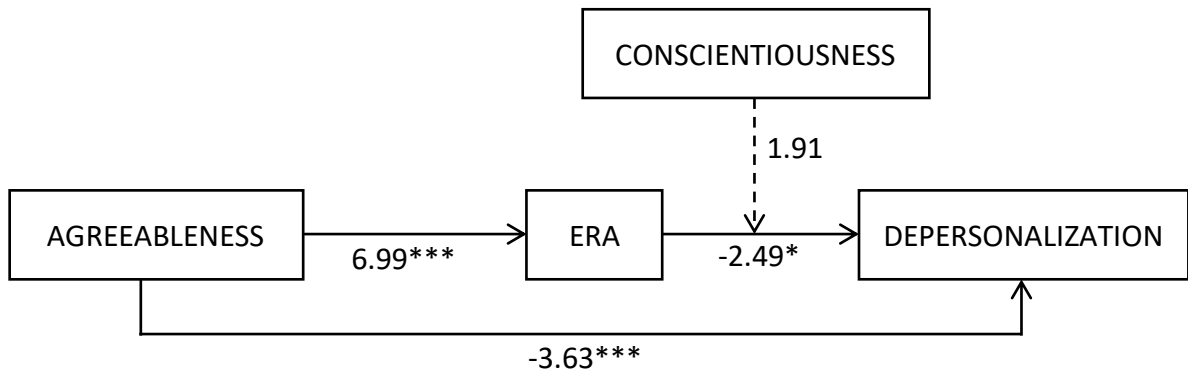
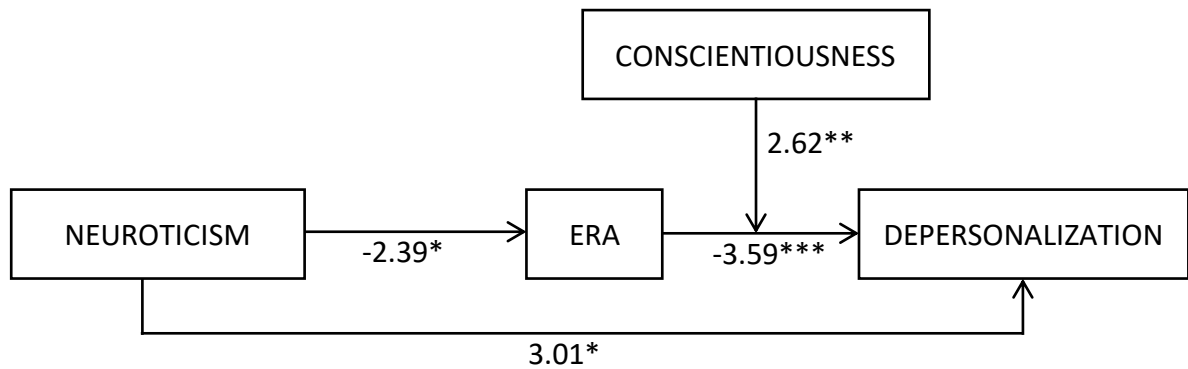


Figure 1. Interaction of conscientiousness on the depersonalization-emotion regulation abilities (ERA) relationship.



Partial mediation: -0.15, SE = .049, 95% CI [0.25, 0.06]



Moderated mediation: -0.05, SE = .028, 95% CI [-0.12, -0.01]

Conditional mediation effects at different conscientiousness levels:

- - 1SD conscientiousness: 0.08, SE = .034, 95% CI [0.02, 0.16]
- Mean conscientiousness: 0.05, SE = .025, 95% CI [0.01, 0.12]
- + 1SD conscientiousness: 0.02, SE = .025, 95% CI [-0.02, 0.08]

Figure 2. Moderated mediation models of the effects of agreeableness and neuroticism on depersonalization. The dashed line indicates a non-significant path. ERA = Emotion Regulation Abilities. * $p < .05$; ** $p < .01$, *** $p < .001$.

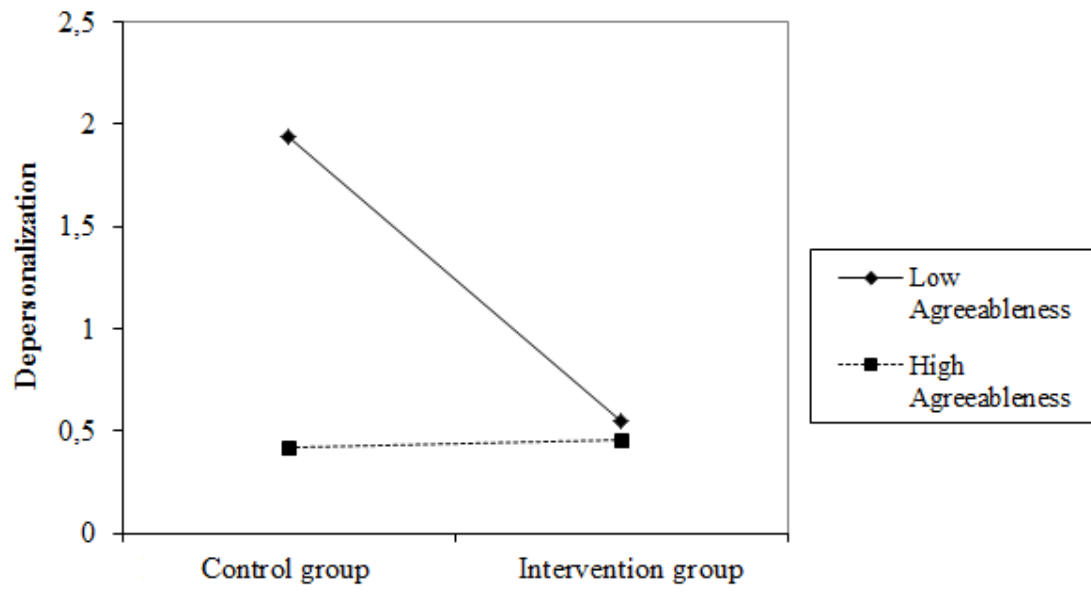


Figure 3. Interaction of agreeableness on the depersonalization-intervention relationship.