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Teacher's Emotional Self-Regulation Strategy Questionnaire: Development and Validation

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Received: July, 2019

Accepted: March, 2020

Abstract

This study aimed to develop a questionnaire to measure EFL teachers' perceptions and beliefs about emotional self-regulation. To do so, a Teachers' Emotional Self-Regulation Questionnaire (TESQ) was developed, entailing four constructs underlying emotional self-regulation, of awareness and attention to emotions and emotion regulation, emotion management, teachers' practices of emotion regulation, and teachers' emotional self-regulation strategies. This questionnaire was administered to 367 teacher participants. Exploratory and confirmatory factor analyses were run to ensure the validity of the instrument. The findings revealed that the four factors extracted from the literature can be regarded as the four constructs that the test claims to measure. Furthermore, internal consistency measures demonstrated its reliability as a whole. This questionnaire was found useful for EFL teachers, teacher educators, and language researchers who are interested in gaining understanding of teachers' emotional responses.

Keywords: Confirmatory factor analysis; emotional self-regulation; exploratory factor analysis; questionnaire development, reliability, validity **Introduction**

Emotion has been a neglected field of study in educational contexts (Lund & Chemi, 2015; Schutz & Pekrun, 2007). It is a widely held belief that emotions are directly associated with the cognitive dimensions of teaching and are an integral part to teaching (Hargreaves, 2001), and that teachers' emotions have a critical function in students' learning and the nature of the interactions and relationships between teachers and students (e.g., Hamre & Pianta, 2005; Turner, Meyer, & Schweinle, 2003). Hargreaves (1998) also argues that good instruction is fueled by positive emotions, and good instructors demonstrate their eagerness during teaching, which proportionately excites their students. Language researchers have clearly directed great attention to the feelings experienced by instructors during regular teaching and their impact on the lives of the teachers and learners (e.g., Cross & Hong, 2012; Hagenauer & Volet, 2014a; Hargreaves, 1998, 2000, 2001; Schutz, Hong, Cross, & Osbon, 2007; Sutton, 2004; Sutton, Mudrey-Camino, & Knight, 2009; Sutton & Wheatley, 2003; Zembylas, 2005).

Generally, teachers' emotions are factors of crucial importance in education, leading Fried (2011) to claim that a novel path in research on emotions is to delve into the practical procedures for regulating the teachers' emotions, considering the strategies employed for emotional self-regulation. Emotional self-regulation resides in the broader array of emotion-regulation processes, entailing the management of feelings of ourselves and others (Burman, Green, & Shanker, 2015; Niven, Totterdell, & Holman, 2009). Emotional self-regulation is the capacity to react to the continuous demands of involvement in the scope of feelings in a way that is socially passable and adequately adaptable to allow unconstrained reactions just as the capability to postpone spontaneous reactions required. The underlying components of emotion regulation incorporate affect management, mood management, mood repair, adapting, and defense (Gross, 1998a).

It is time for emotion regulation on the part of the teacher when his/her emotion is in paucity of harmony with the desired objectives. Emotion regulation is represented through the processes by which individuals affect the type of emotions they experience, and when and how those emotions are experienced and expressed (Gross, 1998a, 2002; Richards & Gross, 2000). Emotions are multi-dimensional processes, consisting behavioral. experiential, and physiological dimensions. "Emotions affect and are intertwined with many of the cognitive processes of learning and classroom motivation and social interaction" (Fried, 2011, p. 1). Therefore, emotion regulation encompasses alterations in intensity, latency, duration, initiation time and offset of response in these componential processes (Gross, 1998a).

There seems to be a lack of studies on teachers' emotional perceptions and emotion regulation strategies, particularly in a national context. With the English language teaching assuming greater and greater importance in academia, the role of the teachers, as the main players in this enterprise, becomes outstanding. Although several studies have addressed teacher emotion and emotion regulation strategies (Cross & Hong, 2012; Gu & Day, 2007; Hargreaves, 2000, 2005; Hargreaves & Tucker, 1991; Helsing, 2007; Hosotani & Imai-Matsumura, 2011; Uitto, Jokikokko, & Estola, 2015; Yin & Lee, 2012; Zembylas, Charalambous, Charalambous, Kendeou, 2011), a number of areas are left unexplored or underdeveloped. First of all, there is a lack of a principled and professionally developed instrument examining teachers' emotional self-regulation in depth, mainly in terms of the strategies employed. Secondly, there is a dearth of studies on the components of teachers' emotional self-regulation. Consequently, the present study aims to bridge the gap in the literature by attempting to identify the components of teachers' emotion regulation to develop a questionnaire.

Literature Review

Emotions are of paramount significance for teaching due to three main reasons: (1) teaching incorporates interaction among teachers and students, (2) teachers' personal and professional identities are often so interwoven that classrooms become venues for their self-confidence, fulfillment and vulnerability, and (3) teachers have profoundly invaluable feelings about the profession they have as they invest themselves in it (Nias, 1996). Gross (1998a) defined emotion regulation from a social psychological perspective as "the processes by which individuals consciously or unconsciously influence which emotions they have, when they have them, and how they experience and express them" (p. 275). Additionally, Gross (1998a, 1998b) made a distinction between two broad categories of emotion regulation: antecedent-focused emotion regulation and response-focused emotion regulation, where the former occurs before emotions are generated, and the latter occurs after response tendencies are triggered.

In defining teachers' emotions, Scherer (e.g., 1984, 2009) established a multi-componential conceptualization, encompassing cognitive, physiological, motivational, and expressive components. The teachers' emotions are deemed to be pertinent not only to their own well-being but also to the functioning of classrooms and teachers' retention in their profession (Chang, 2009; Uitto, Jokikokko, & Estola, 2015). Research proposes the existence of a direct connection between teachers' emotional well-being and their retention in their profession (Chang, 2009). It would not be too much of an exaggeration to state that teachers are at the heart of the

emotional enterprise going on in the classroom due largely to their emotions being intertwined with their teaching quality and the establishment of bonds with the students (Frenzel, 2014; Hagenauer & Volet, 2014b; Hargreaves, 2000, 2005; Klassen, Perry, & Frenzel, 2012; Sutton & Wheatley, 2003). Research has also indicated that there is a wide diversification of the affective facets in instructors and that feelings such as emotionally exhausted or depleted are not sufficient to explicate the emotional lives of the teachers (Hagenauer & Volet, 2014a; Taxer & Frenzel, 2015; Uitto, Jokikokko, & Estola, 2015).

Furthermore, Frenzel, Goetz, Stephens, and Jacob (2009) suggested that the recurrence of positive emotions on the part of the teachers lead to flexibility and creativity in teaching strategies that in turn stimulate student motivation, while the recurrence of negative emotions debilitates such flexibility and creativity, in turn affecting student learning outcomes. Considerable attention has indeed been laid upon the emotional experiences teachers may have during teaching and the potential effects of these experiences on the teachers' and students' lives (e.g. Cross & Hong, 2012; Hagenauer & Volet, 2014a; Hargreaves, 1998, 2000, 2005; Schutz, Cross, Hong, & Osbon, 2006; Sutton, 2004; Sutton, Mudrey-Camino, & Knight, 2009; Sutton & Wheatley, 2003; Zembylas, 2005). Sutton and Wheatley (2003), for instance, argue that the negative emotions frequently reported by the teachers such as anger and exhaustion reduce teachers' intrinsic motivation and increase students' negative emotional experiences.

Emotion regulation has gained currency over the past decades, as an essential practice inside the classroom (Gross, 1998a). Thompson (1994) sees emotion regulation as intrinsic and extrinsic processes responsible for learning how to recognize, monitor, evaluate, and modify emotional reactions. Likewise, Gross (1998a, 1998b) made a distinction between two

broad classifications of emotion regulation: Antecedent-focused emotion regulation and response-focused emotion regulation, where the former occurs before emotions are generated, and the latter occurs after response tendencies are triggered. The underlying components of emotion regulation incorporate affect management, mood management, mood repair, adapting, and defense (Gross, 1998a). In the present study, emotion regulation is attributed to strategies employed by the teachers to regulate their emotions in the classroom.

The teachers' emotion regulation by Gross (2002), his theoretical and empirical studies on emotion regulation in the 1990s, were extracted from the coping theories of Lazarus (1966, 1993) and Lazarus and Folkman (1984). In this model, compatible with Lazarus, Gross regards "situation modification as problem-focused coping, aimed at changing the personenvironment realities behind negative emotions or directly changing a situation to regulate emotions" (Jiang, Vauras, Volet, & Wang, 2016, p. 23). Another strategy suggested by Lazarus (1993) is emotion-focused coping, which entails "reducing unpleasant emotions through dealing with the emotion itself, or internally changing the appraisals of the demanding situation" (Jiang et al., 2016). Therefore, as Lazarus' coping and Gross' emotion regulation is overlapped to a large extent, both are considered to be mediating factors in the emotion processes.

The role of emotion regulation strategies and emotional self-regulation has been played up in many studies; however, not many studies have placed their focal point of attention on developing an emotional self-regulation questionnaire (ESRQ). This is while emotional aspects of teaching and learning are intertwined with cognitive, motivational, and psychological dimensions (Buric, Soric, & Penezic, 2016). In a study conducted by Buric, Soric, and Penezic (2016), an attempt was made to develop a psychometrically sound and contextually specific multidimensional selfreport instrument intended to examine the particular emotion regulation strategies predominantly employed by the students in different academic situations. The questionnaire they developed entailed 8 scales, each assessing a separate emotion regulation strategy: Avoiding situations, developing competences, redirecting attention, reappraisal, suppression, respiration, venting, and seeking social support (p. 138).

One of the studies bearing similarity with the present study is that of Buric, Soric, and Penezic (2016). They intended to develop a multidimensional self-report instrument to investigate the particular emotion regulation strategies the students tend to employ in different academic situations. Buric, Soric, and Penezic (2016) designed the Academic Emotion Regulation Questionnaire taking advantage of both qualitative and quantitative data, and by conducting studies on separate samples of highschool and university students (N1=20, N2=1030, N3=359, and N4=230). Their questionnaire contained 8 scales, "each measuring a separate emotion regulation strategy: avoiding situations, developing competences, redirecting attention, reappraisal, suppression, respiration, venting, and seeking social support" (p. 138). All scales of the instrument showed adequate psychometric properties on all participants and were significantly germane to the external variables assessed (i.e., gender, goal orientations, academic achievement, achievement emotions, and cognitive appraisals). Finally, developing competences and avoiding situations were found to be the most beneficial and detrimental strategies for academic emotion regulation respectively.

It is noteworthy that while researchers have succeeded in measuring teachers' emotion regulation strategies with a series of instruments (Buric, Soric, & Penezic, 2016; Gross, 1998a; Gross, 1998b, as some notable

instances), such methods are not comprehensive for the components of emotion regulation and emotion regulation strategies. On the basis of the currently restricted view on the constructs of emotion regulation and emotion regulation strategies, the present study attempts to explore the underlying components of teacher's emotional self-regulation strategies. In addition, a questionnaire on teacher's emotional self-regulation strategies is developed to figure out the extent to which it enjoys reliability and validity.

Method

Participants

The initial participants of this study included 414 EFL teachers, from various language institutes in Iran, who responded to a Teacher's Emotional Self-Regulation Questionnaire. The rationale for the selection of large number of the participants was to make the sample representative enough and the findings coming out of the sample dependable and generalizable. Although an attempt was made to have the participation of equal number of male and female teachers, female teachers outnumbered male teachers by three times. The participants age ranged from 23 to 40. As some items were missed by a number of respondents, the responses with missing items were excluded from the analysis. Table 1 displays the demographic features of the final respondent list.

The participants came from different educational backgrounds, as indicated in Table 2. The participants with majors other than the English language have come from a variety of fields such as architecture, arts, accounting, accounting, banking, biology, business administration, chemical engineering, civil engineering, clinical psychology, computer, information technology, engineering, food science, geology, law, management, MBA, medicine, mathematics, microbiology, physics, sociology, zoology, tourism, etc.

Table 1

The Frequency of EFL Teacher Participants Based on Gender, Experience, Education, and Instructional Level – Final List

Gender	N	Experience	N	Education	N	Instructional Level	Ν
		0-2	85	Certificate	52	Elementary	38
Female	281	4	41	Diploma	19	Pre- intermediate	56
		6	47	Bachelor's	156	Intermediate	56
Male	86	8	37	Master's	109	Upper- intermediate	60
		10	52	PhD	8	Advanced	159
		Above 10	102	Other	14	-	

Before administering the questionnaire among the target participants, 5 language experts in the field of teacher education, selected through convenience sampling, were interviewed to identify the domains and develop more items for the questionnaire.

Instruments

A 5-point Likert-scale *Emotional Self-Regulation Questionnaire* was developed to identify the participants' perceptions regarding emotion and emotion regulation (see Appendix).

Table 2	
Different Educational Majors of the Participants	
Educational Majors	Ν
Teaching of English as a Foreign Language (TEFL)	90
English Literature	67
English Language Translation	44
Linguistics	7
Applied Linguistics	4
Non-English Majors	155

As a rule of thumb, two steps are commonly used to create items and content domains for an instrument. The first step defines content domains from prior research related to the topic which generates novel items for each domain. The second step commences by gathering items and domains from the target respondents based on the first step. Both steps were employed to generate the content domains and the items in each domain of the *Emotional Self- Regulation Questionnaire* in this study. Employing both steps was advantageous in that it ensured all relevant items and content domains were taken into consideration for the *Emotional Self- Regulation Questionnaire* development. Then items were generated to enable assessment of each content domain relating to the teachers' emotion regulation. The items were developed based on some studies in the literature, some of which included

Gross (1998a), Gross (1998b), Gross and John (2003), Chang (2009), Ersay (2007), Salovey, Caruso, and Sitarenios (2003), and Sims (2015) and interviewing 5 language experts involved in the field of teacher education.

Procedure

The first stage before the administration of *Emotion Regulation Questionnaire* was the item development stage. The first stage, therefore, focused on generating content items, identifying dimensions, and classifying an item pool for each dimension. This procedure (examining the extant studies in the literature and expert interviews) generated an array of items relating to the teachers' emotion regulation.

In order to ensure content validity, three professionals in the field of teacher education were invited to examine the questionnaire's items and domains. The professionals were asked to indicate whether they think these items should be included in the questionnaire and how appropriate they are in terms of language and content (Language Relevance: not relevant 1 somewhat relevant 2 quite relevant 3 relevant 4 highly relevant 5; Content appropriateness: Not appropriate 1 somehow appropriate 2 quite appropriate 3 appropriate 4 highly appropriate 5). As a result, some items were discarded because of unsatisfactory ratings, revised, and moved from one content domain to another.

After getting the consent of the participants, the data were collected by distributing the questionnaire both in soft copies through emailing the Office-Word file of the questionnaire to some teachers, and in hard copies through visiting the institutes and handing the survey in to the teachers to be responded to. The study included a convenient sample of 367 EFL teachers (female: 281, male: 86).

Results

The study was intended to develop a questionnaire on emotional selfregulation strategies of teachers and explore the underlying constructs of teacher's emotional self-regulation strategies.

Four constructs were extracted from the literature and expert interviews, based on which 68 items were generated. The extracted constructs entailed (1) awareness and attention to emotions and emotion regulation, (2) emotion management, (3) teachers' practices of emotion regulation, and (4) teachers' emotional self-regulation strategies. Twenty-three items were developed as to construct 1, eight items regarding constructs 2, seventeen items germane to construct 3, and twenty items in line with construct 4.

Results of Exploratory Factor Analysis (EFA)

In order to ensure the construct validity of the test, Exploratory Factor Analysis (EFA) with principal component analysis and varimax rotation was run. Table 3 shows the results of Kaiser-Meyer-Olkin Measure (KMO) and Bartlett's Test of Sphericity.

Table 3

Results of KMO and Barliell's Test of Sphericity								
Kaiser-Meyer-Olkin Measure o	.80							
Bartlett's Test of Sphericity	Approx. Chi-Square	7678.68						
	df	2278						
	Sig.	.00						

Regults of KMO and Rautlatt's Tast of Schewicity

As the table shows, the assumptions of EFA were met in this study. KMO was .80 and Bartlett's Test of Sphericity was significant (.00). Scree plot and eigenvalues above 1 were examined to determine the number of factors. Since KMO was more than 0.70, the sample selected in the study and the factor analysis employed would probably provide the appropriate common factors. The significant Bartlett's Test of Sphericity for the designed questionnaire i.e. $x^2=7678.684$, df=2278, p<.001, indicated that the correlation matrix was not an identity matrix. Moreover, the highest loading for each item was considered as the appropriate factor for that item. Cross-loadings and loadings less than .30 were removed. Results of the EFA can be seen in Table 4.

As Table 4 shows, the four factors can be regarded as the four constructs that the test claims to measure, namely (1) awareness and attention to emotions and emotion regulation, (2) emotion management, (3) teachers' practices of emotion regulation, and (4) teachers' emotional self-regulation strategies. Among 23 items for the first sub-component, 19 items loaded on the first factor. Four items were deleted because of low-loadings or cross loadings (q1, q3, q10, and q20). Moreover, among 8 items for the second sub-component, only 6 items loaded on the second factor. Two items were deleted because of low-loadings (q26 and q29). In addition, among 17 items of the third sub-component, 14 items remained. Three items were deleted because of low-loadings (q38, q43, and q45). Finally, among 20 items for the fourth sub-component, 16 items loaded on the fourth factor. Four items were deleted because of low-loadings or cross loadings (q50, q52, q58, and q66). Therefore, 55 items have loaded acceptably i.e. .30 or higher, on the four mentioned factors.

Table 4Rotated Component Matrix^a

compo	onents			Ite	m compo	nents			
Item	1	2	3	4		1	2	3	4
1.270					35		.631		
2.462					36		.315		
3 .233					37		.540		
4 .578					38.340	.327			
5.482					39		.499		
6.491					40		.519		
7 .639					41		.418		
8.410					42		.312		
9.368					43.329	.353			
10.331			.354	4	44		.401		
11 .534					45			297	
12 .501					46		.359		
13 .316					47		.401		
14 .530					48		.586		
15 .551					49			.549	
16.348					50			.230	
17.401					51			.549	
18 .477					52			.220	
19 .390					53			.351	
20 .288			.24	2	54			.366	
21 .398					55			.351	
22 .468					56			.366	
23 .380					57			.448	
24			38	84	58		.359	.351	
25	.531				59			.490	
26			22	20	60			.394	
27	.598				61			.490	
28	.304				62			.394	
29			24	2	63			.388	

30	.399	64		.310
31	.509	65		.424
32	.592	66	.303	.297
33	.610	67		.425
34	.700	68		.309

Results of Confirmatory Factor Analysis (CFA)

Following this, Confirmatory Factor Analysis (CFA) was run to determine whether the four-factor solution obtained in EFA can be confirmed and examine the model fit. Based on the CFA analysis, the association between each sub-factor of the proposed model was analyzed and the results can be seen in Figure 1.

To check the model fit, goodness of fit indices were examined. In this study, χ^2/df , GFI, CFI, and RMSEA were used. Because some measurement models did not show adequacy to the data, the researcher made some modifications on the model. These modifications included the removal of three items of the first factor (q19, q21, q23), one item (q24) of the second factor, one item of the third factor (q44), and four items of the fourth factor (q49, q57, q60, and q63) due to low loadings (lower than .30). Goodness of fit indices before and after modification can be seen in Table 5. To have a fit model, χ^2/df should be less than 3, GFI and CFI should be above .90, and RMSEA should be less than .08.

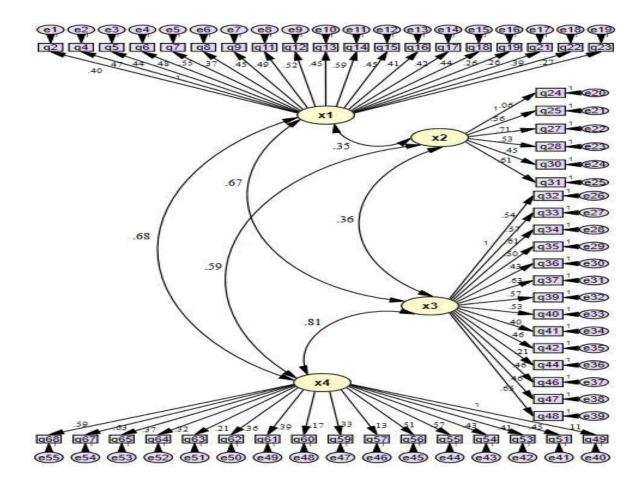


Figure 1. CFA Model Before Modification

As Table 5 shows, all the goodness of fit indices are within the acceptable range after modification. Therefore, the scale enjoyed construct validity.

Goodness of fit indic	es			
	X2/df	GFI	CFI	RMSEA
Acceptable fit	<3	>.90	>.90	<.08
Model	2.38	.86	.87	.061
Revised model	2.57	.91	.92	.073

Table 5Goodness of fit indices

Results of Descriptive Statistics

Table 6 presents descriptive statistics of sub-constructs of the designed questionnaire (1) awareness and attention to emotions and emotion regulation, (2) emotion management, (3) teachers' practices of emotion regulation, and (4) teachers' emotional self-regulation strategies; including the mean, standard deviation, maximum, and minimum scores. The comparison of these scores can be seen in the following tables. The possible range of score for x1 with sixteen items is between 16 and 80, for x2 with five items is between 5 and 25, for x3 with thirteen items is between 13 and 65, and x4 with twelve items is between 12 and 60. Because the number of items was different in the various subscales of the questionnaire, an average item score was computed for each sub-construct, ranging from 1 to 5 (Mean per item) in order to compare the sub-scales.

As presented in Table 6, the mean score of Overall Scale is 177.29 with standard deviation of 16.09. In addition, the table shows that number of participants was 369. Results of mean scores per item revealed that among four sub-constructs of the designed questionnaire, x4 has the highest mean score (3.91) and x2 has the lowest mean score (3.54).

	Ν	Minimum	Maximum	Mean	Std.	Mean
					Deviation	per item
X1	369	41.00	80.00	61.90	6.96	3.86
X2	369	10.00	25.00	17.70	2.88	3.54
X3	369	33.00	65.00	50.70	5.69	3.90
X4	369	32.00	63.00	46.97	5.28	3.91
Overall Scale	369	133.00	217.00	177.29	16.09	3.85

Table 6Descriptive Statistics of Sub-constructs of the Designed Questionnaire

Reliability of the Scale after Validity Analysis

Table 7 summarizes the information obtained from Cronbach's alpha analyses. As can be seen, the utilized questionnaire gained acceptable indices of reliability as a whole as well as in their subscales.

Results of the analyses showed that the designed questionnaire had a high internal consistency of items or reliability (.88) as a whole. Salvucci, Walter, Conley, Fink, and Saba (1997) gave a criterion to interpret reliability coefficient as an internal consistency index: "The range of reliability measures are rated as follows: (a) Less than 0.50, the reliability is low, (b) Between 0.50 and 0.80 the reliability is moderate and (c) Greater than 0.80, the reliability is high" (p.115).

Table 7Results of Cronbach Alpha Indexes After Validation

Scale	Subscale	Numbe	Item Numbers	Cronbac
	S	r of items		h alpha
	X1	16	2,4,5,6,7,8,9,11,12,13,14,15,16,17,18 ,22	.80
	X2	5	25,27,28,30,31	.63
Teacher' s ESRS	X3	13	32,33,34,35,36,37,39,40,41,42,46,47, 48	.82
	X4	12	51,53,54,55,56,59,61,62,64,65,67,68	.65
	Overall Scale	46		.88

Discussion

The primary purpose of the study was to construct and ensure the validity of a questionnaire, on teacher's emotional self-regulation strategies, which reflected its underlying components. Results built on an EFA revealed the four distinct constructs underlying the teacher's emotional self-regulation strategies. Specifically, model fit statistics provided evidence that 13 items did not show adequate fit, which were removed accordingly. All other items revealed uniformly high standardized loadings, and strong construct reliability estimates provided further support for *Teacher's Emotional Self-Regulation Strategies (TESR)* in EFL context.

The first finding of the current research, based on EFA and CFA indices, revealed that the four factors extracted from the literature (i.e., awareness and attention to emotions and emotion regulation, emotion management, teachers' practices of emotion regulation, and teachers' emotional self-regulation strategies) can be regarded as the four constructs that the test claimed to measure. The constructs had adequate loading and acceptability, except for thirteen items, which showed indices lower than the satisfactory range, and the remaining 55 items of the instrument were approved. As for confirmatory factor analysis, 9 items were removed for the measurement models to show adequacy to the data. This, in turn, represents a satisfactorily high level of validity of the instrument. As for the reliability of the designed instrument, the results of Cronbach's alpha showed that the designed questionnaire gained high indices of reliability as a whole.

This study is contributing to the extant literature by constructing and validating a TESQ questionnaire particularly used for EFL teachers. Additionally, this questionnaire identified a range of strategies through which teachers regulate their emotions. The TESQ has had a unified and stable factor analysis, indicating the proper psychometric characteristics of the survey. All four factors identified in the present study represented the four major constructs essential to emotional self-regulation. Generally, the constructs of awareness and attention to emotions and emotion regulation, and teachers' emotional self-regulation strategies showed the most desirable reliability index, although the overall reliability index was found desirable.

Perhaps this offers plausibility to the claim that awareness and attention to emotions and emotion regulation functions as a precondition to emotional self-regulation strategies. In fact, emotion regulation is coherently appertained with self, particularly through effective communication among body, mind, and feelings (Price & Hooven, 2018). This in turn, creates an area of investigation of the effects of emotion introspection, interceptive emotion, and self-reflection on the employment of emotion regulation strategies. All in all, caution should be applied when interpreting the results. The users of this questionnaire should be aware that although the TESQ is a validated measure for assessing teachers' emotional self-regulation awareness, perception, and strategies, it is not a direct assessment instrument to evaluate the teachers' actual teaching skills or performance.

Conclusion

The main objective of this study was to develop and validate an instrument on EFL teachers' emotion regulation or emotion regulation strategies. This study found that there were four constructs underlying the emotional selfregulation questionnaire; (1) awareness and attention to emotions and emotion regulation, (2) emotion management, (3) teachers' practices of emotion regulation, and (4) teachers' emotional self-regulation strategies. The *Teachers' Emotional Self-Regulation Questionnaire* (TESQ) was found to be valid and reliable and in line with the models presented in Gross (1998a), Gross (1998b), Gross and John (2003), Chang (2009), Ersay (2007), Salovey, Caruso, and Sitarenios (2003), and Sims (2015).

As Buric, Soric, and Penezic (2016) argued, most emotion regulation strategies are germane to non-pleasant emotions. This might be attributed to the fact that emotion regulation strategies are intended to down-regulate unpleasant emotions. The number one priority, thus, is developing competences as "the most beneficial, and avoiding situations as the most detrimental, way of regulating academic emotions" (Buric, Soric, & Penezic, 2016, p. 146). A safe conclusion here is that the concept of emotion regulation needs to be incorporated in EFL teacher training programs, prodding pre-service and in-service teachers to earn more sensitization of it. It seems that in its eagerness to give more voice and value to teachers and their knowledge, decisions about emotion regulation should be made at macro rather than micro-level. As Gardner (1999) commented, decisions about education concentrate on contemplating about goals and values; which in turn are appropriately made by the macro, well-versed community and not by any beneficiary sector.

Once again, as Gross (1998a, 1998b) and Buric, Soric, and Penezic (2016) argue, more research is needed to know about EFL teachers' perceptions and practices of emotion regulation and how they may give rise to their awareness and knowledge in this regard. The findings of the study will be of interest to anyone desiring to find out how foreign language teachers can invigorate their perceptions and practices of emotional self-regulation and how the strategies indicated in the questionnaire impact on their teaching. Teachers (pre-service, novice, in-service, experienced), teacher trainers, course designers, materials and textbook developers, at a micro level, and language centers, teacher training academies, and those responsible for decision-making at a macro level, will find here insights and practical examples to adopt and adapt.

The Teacher's Emotional Self-Regulation Questionnaire (TESQ) can be used to investigate the effectiveness of teachers in emotion regulation. It is also plausible to use the TESQ as a tool to assess the effectiveness of teacher's preparation programs or professional development courses. Obviously, this new instrument requires further testing and validation. Thus, future research can include a similar, but large-scale study to come up with more reliable findings in various contexts. Another underexplored area is investigating the teachers' emotional self-regulation strategies considering their personality types or other teacher variables like teacher resilience or teacher reflection.

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Appendix Teachers' Emotional Self-Regulation Questionnaire

Dear Respondents, please put a check mark next to the box which best describes you and your perceptions about your job as an English teacher considering the following scale. Your careful completion of the questionnaire will definitely contribute to real data and is greatly appreciated.

1: Strongly Disagree (SD), 2: Disagree (D), 3: No Idea (NI), 4: Agree (A), 5: Strongly Agree(SA)

Items	SD	D	NI	Α	SA
	1	2	3	4	5
1. I realize immediately when I lose my temper.	1	2	3	4	5
2. I can tell what my feelings are and how I feel.	1	2	3	4	5
3. I know when I am stressed.	1	2	3	4	5
4. I know how to keep calm in difficult or stressful situations.	1	2	3	4	5
5. I am good at adapting my emotions.	1	2	3	4	5
6. I realize when I am being emotional.	1	2	3	4	5
7. I feel at ease about my emotions.	1	2	3	4	5
8. I always know when I am being unreasonable.	1	2	3	4	5
9. I pay a lot of attention to my emotions or moods.	1	2	3	4	5
10. I often think about my feelings.	1	2	3	4	5
11. I am usually very clear about my feelings.	1	2	3	4	5
12. I know what is going on inside me.	1	2	3	4	5
13. Awareness of my own emotions is very important to me.	1	2	3	4	5
14. I am aware of my feelings.	1	2	3	4	5
15. I am able to describe my feelings easily.	1	2	3	4	5
16. I am aware of the non-verbal emotional messages other people send.	1	2	3	4	5

17. My quick impressions of what people are feeling are usually right.	1	2	3	4	5
18. I have a rich vocabulary to describe my emotions.	1	2	3	4	5
19. I see being emotional as a positive thing.	1	2	3	4	5
20. Feelings give direction to academic life.	1	2	3	4	5
21. Being in touch with emotions is essential.	1	2	3	4	5
22. I have a mostly optimistic outlook.	1	2	3	4	5
23. I believe in acting from the heart.	1	2	3	4	5
24. I try to keep my emotions to myself.	1	2	3	4	5
25. When I want to feel more positive emotion, I change what I am thinking about.	1	2	3	4	5
26. When I am feeling positive emotions, I am careful not to express them.	1	2	3	4	5
27. When I want to feel less negative situations, I change what I am thinking about.	1	2	3	4	5
28. When I am feeling negative emotions, I make sure not to express them.	1	2	3	4	5
29. I control my emotions by not expressing them.	1	2	3	4	5
30. When I am faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	1	2	3	4	5
31. When I want to feel more positive emotion, I change the way I am thinking about the situation.	1	2	3	4	5

32. I can understand when my students are stressed or upset.	1	2	3	4	5
33. By looking at my students' facial expressions, I can recognize the emotions they are experiencing.	1	2	3	4	5
34. I can understand the emotions of my students.	1	2	3	4	5
35. I am good at empathizing with my students.	1	2	3	4	5
36. Difficult students do not annoy me.	1	2	3	4	5
37. I can make my students think in another way when they feel negative emotions.	1	2	3	4	5
38. I can regulate my emotions in negative situations.	1	2	3	4	5
39. I can regulate my student's emotions in difficult situations.	1	2	3	4	5
40. I can feel close to my students, even in moments of silence.	1	2	3	4	5
41. I find examination of my feelings useful in solving my students' and classroom problems.	1	2	3	4	5
42. I can cope with difficult situations.	1	2	3	4	5
43. I can change bad situations quickly.	1	2	3	4	5
44. I can consciously change my mood.	1	2	3	4	5
45. I can suppress my emotions when I need to.	1	2	3	4	5
46. I do not let stressful situation affect me in the classroom.	1	2	3	4	5
47. I can handle stressful situations in the classroom without getting too nervous.	1	2	3	4	5

48. When my students are in a bad mood, I can help them calm down and feel better quickly.	ı 1	2	3	4	5
49. I ask the class to work in quiet when I am in an emotionally tough situation.	7 1	2	3	4	5
50. I divert my attention when I am in an emotionally difficul situation.	t 1	2	3	4	5
51. I try to think of positive aspects when I am in an emotionally difficult situation.	1	2	3	4	5
52. I do self-talk when I am in an emotionally difficult situation.	1	2	3	4	5
53. I take a deep breath when I am in an emotionally difficul situation.	t 1	2	3	4	5
54. I control my facial expressions to regulate my emotions when I am in an emotionally difficult situation.	5 1	2	3	4	5
55. In a stressful situation in the class, I make myself think abou it in a way that helps me stay calm.	t 1	2	3	4	5
56. When I become upset I remind myself of all the pleasures in being the agent of the students' progress.	1	2	3	4	5
57. I neglect the situation when I am in an emotionally difficul situation.	t 1	2	3	4	5
58. I physically move away from the situation when I am in ar emotionally difficult situation.	ı 1	2	3	4	5
59. I talk to peers and read positive thoughts each morning before class time or school.	; 1	2	3	4	5

60. I sometimes hide my true feelings in the class since I think it is inappropriate for teachers to reveal their unpleasant emotions (i.e. anger, frustration, disappointment).	1	2	3	4	5
61. When I want to feel more pleasant emotions (such as joy or amusement), I change what I am thinking about.	1	2	3	4	5
62. I increase physical activity when I am in an emotionally difficult situation.	1	2	3	4	5
63. I tell my students that I am not feeling well to influence their behavior.	1	2	3	4	5
64. In difficult situations, I consult my feelings to make a decision.	1	2	3	4	5
65. When I feel bad due to my classroom problems, I try not to pour out my troubles to my colleagues.	1	2	3	4	5
66. When I feel miserable due to failure at work, I talk about it with my colleagues.	1	2	3	4	5
67. I know the strategies to make or improve my moods.	1	2	3	4	5
68. I know the strategies to make or improve my students' moods.	1	2	3	4	5