Measuring emotional labor in the classroom: The darker emotions

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Abstract

Research on emotional labor amongst teachers has focused on surface acting and deep acting of positive emotions. However, there is evidence that negative emotions play a vital role too. This study developed and examined two new scales, surface acting of negative emotions and deep acting of negative emotions, as an extension of the Dutch Questionnaire on Emotional Labor (D-QEL). Participants were two subsamples of secondary school teachers (total $N = 399$). A confirmatory factor analysis showed that both deep as well as surface acting of negative emotions have to be distinguished from acting positive emotions. The difference between the scores of experienced and inexperienced teachers on the new scales can be taken as proof of their validity.

Key words

Measuring emotional labor in the classroom: The darker emotions.

Teaching is a profession that involves high levels of emotional labor (Hargreaves, 1998) and shows a high incidence of burnout (Brouwers & Tomic, 2000). Until now, research on emotional labor amongst teachers has mainly focused on the expression of positive emotions and the suppression of negative emotions. "Good teaching is charged with positive emotions" (Hargreaves, 1998, p. 835), but teachers do not always experience these emotions. In order to meet the expectations of their jobs, teachers may feign positive emotions or exaggerate them (Ogbonna & Harris, 2004), while on the other hand, they may suppress negative emotions like anger, disappointment or uncertainty (Ybema & Smulders, 2002).

Hochschild (1983) was the first to draw attention to the role of emotional regulation as a part of a job. After studying the various aspects of the work of flight attendants, she was convinced that their work could not be fully described by the physical and cognitive aspects of their work. Having to deal with passengers and their emotions appeared to be an important part of their job. Hochschild described *emotional labor* as "the management of feeling to create a publicly observable facial and bodily display" (Hochschild, 1983, p. 275). Emotional labor requires workers to induce or suppress the expression of emotions in order to influence the emotions, attitudes and behaviors of others. Hochschild distinguished two ways of managing expressions and feelings: *surface acting* and *deep acting*. Surface acting refers to the expression of emotions that are not actually felt. Deep acting, consists of actively inducing, suppressing or shaping the desired emotions. Hochschild (1983) assumed that there is a price to be paid for emotional labor, just as there is for physical and mental labor. In her study of the work of

flight attendants, she demonstrated that performing emotional labor can lead to negative results such as alienation from personal feelings, stress and, in the long run, psychological health complaints.

After Hochschild (1983), several researchers conceptualized emotional labor with a different emphasis (see Grandey (2000) and Zapf (2002) for reviews). Although there is no commonly accepted conceptualization of emotional labor, researchers agreed on the assumption that individuals *can* regulate their emotions and the expression of emotions at work. Various researchers adopted surface acting and deep acting as two main strategies of regulating emotions (Briët, Näring, Brouwers, & van Droffelaar, 2005; Brotheridge & Grandey, 2002; Brotheridge & Lee, 2002; Grandey, 2000; Näring, Briët, & Brouwers, 2006; Zammuner & Galli, 2005a; Zapf, 2002), but they also added other ones. Ybema and Smulders (2002) and Briët et al. (2005) mentioned *suppression*, hiding negative feelings like anger or disappointment. Furthermore, Briët et al. (2005), Zammuner and Galli (2005b) and Martínez-Iñigo et al. (2007) distinguished *emotional consonance*, which is in fact the absence of emotional labor. In the case of emotional consonance, the emotions felt by an employee are totally congruent with what the job requires. Hochschild (1983) called this form *passive deep acting*; Zapf (2002) used the term *automatic regulation*.

Several instruments to measure emotional labor have been developed over the past 10 years. Most of these scales do not measure negative emotions or they do not specify any emotion. The formulation of the emotions in the items of the scales surface acting and deep acting of the Emotional Labor Scale (ELS) (Brotheridge & Lee, 1998) is neutral or positive, and the same goes for the surface acting and deep acting items of the

Dutch Questionnaire on Emotional Labor (D-QEL) (Briët, Näring, Brouwers, & van

Droffelaar, 2005) that are mainly derived from the ELS. An example of a surface acting

item is: "I pretend to have the emotions I need to display for my job." An example of a

deep acting item is: "I make an effort to actually feel the emotions I need to display

towards others." The items do not specify whether the emotions are positive or negative.

However, in most professions employees are expected to keep the climate calm,

agreeable and friendly (Hochschild, 1983), and that is why most people assume that the

items refer to positive emotions.

However, this assumption does not hold in every profession. Educational

sociologists like Hargreaves (1998) and Paulle (2005) pointed out that successful teachers

do not restrict themselves to the use of positive emotions because the use of negative

emotions can be of vital importance. Paulle (2005) demonstrated that successful teachers

are capable of managing the emotional climate of their class by showing a whole range of

feelings: kindness and empathy, but also, if necessary, anger and a certain harshness. The

latter emotions are, however, only mentioned in qualitative studies and then it becomes

clear that it is not easy for teachers to learn to accept and understand their darker

emotions (Winograd, 2003). Emotional labor scales that focus on positive as well as

negative emotions would therefore be very useful for research on teachers.

When one looks at the individual items of emotional labor scales that measure

surface acting and deep acting, they are formulated in such a way that they explicitly or

implicitly refer to positive emotions. To date, Glomb and Tews (2004) have been the only

researchers who investigated surface acting of negative emotions. They found a positive

correlation between surface acting of negative emotions and emotional exhaustion. The

aim of the present study is to investigate whether and to what extent teachers engage in surface and deep acting of negative emotions. For this purpose, we will develop two new scales with discrete negative emotions and assess whether they overlap with psychometrically existing scales or whether they form new scales. We hypothesize that both new scales will emerge as distinct factors.

> *Hypothesis 1a: In a confirmatory factor analysis together with the existing items of the D-QEL, the items of surface acting of negative emotions will be a distinct factor.*

> *Hypothesis 1b: Submitted to a confirmatory factor analysis together with the existing items of the D-QEL, the items of deep acting of negative emotions will be a distinct factor.*

Secondly, we want to investigate how inexperienced teachers differ from experienced teachers in the use of emotional labor strategies, and how their use is related to burnout symptoms. Paulle (2005) stated that successful teachers use negative emotions to manage the emotional climate of their class. Assuming that teachers who are not capable of doing so are more likely to withdraw from the profession, we expect inexperienced teachers to engage less in strategies using negative emotions than their experienced colleagues.

> *Hypothesis 2a: Inexperienced teachers report less surface acting of negative emotions than experienced teachers.*

> *Hypothesis 2b: Inexperienced teachers report less deep acting of negative emotions than experienced teachers.*

Method

Participants and procedure

Data were collected in 14 secondary schools and 2 colleges of education. Via these institutions, 2602 teachers and approximately 550 student teachers received an e-mail asking them to complete an electronic questionnaire. After 2 to 4 weeks a reminder was sent. The final sample consisted of 276 experienced teachers (response rate 11.6%) and 123 inexperienced teachers (response rate approximately 16%). The sample consists of teachers working in schools in the Netherlands that are not located in the four largest Dutch cities, Amsterdam, Rotterdam, Utrecht and The Hague.

Experienced teachers were defined as those teaching for at least 4 years. This subsample consisted of 142 men (51.4%) and 134 women (48.6%), with an average age of 47.7 yrs ($SD = 10.1$), ranging from 26 to 64 yrs. The average number of years of experience in the profession was 19.2 ($SD = 11.7$), ranging from 4 to 43 yrs. The inexperienced teachers sample included student teachers (70.7%) and teachers who have been teaching for 1 year or less (29.3%). This subsample consisted of 35 men (28.5%) and 88 women (71.5%), with an average age of 26.2 yrs ranging from 18 to 51.

Measures

Emotional labor. To measure emotion regulation strategies, we used the Dutch Questionnaire on Emotional Labor (D-QEL) (Briët, Näring, Brouwers, & van Droffelaar, 2005), extended with two newly developed subscales. The D-QEL is based on the Emotional Labor Scale (ELS) (Brotheridge & Lee, 1998) but consists of four instead of two scales. It measures surface acting (5 items), deep acting (3 items), suppression (3

items) and emotional consonance (2 items). Items can be answered on a 5-point scale (1 = "never", 5 = "always"). An example of a surface acting item is: "I pretend to be in a good mood". An example of a deep acting item is: "I make an effort to actually feel the emotions I need to display towards others". An example of a suppression item is: "I hide my anger about something a student does". An example of an emotional consonance item is: "I react to students' emotions naturally and easily". Cronbach's α was .74 for surface acting (n = 390), α = .73 for deep acting (n = 389), α = .40 for suppression (n = 390) and α = .63 for emotional consonance (n = 398).

Initial item selection for the new subscales surface acting of negative emotions and deep acting of negative emotions was based on the semantic classification proposed by Shaver, Schwartz, Kirson, & O'Connor (1987). This classification reduces a variety of emotions into six families of which three are negative: anger, sadness and fear. These basic negative emotions correspond with the negative emotions that are actually experienced by teachers (Sutton & Wheatley, 2003). Hargreaves (1998) also mentioned that teachers sometimes fake anger or disappointment. For both new scales we formulated three items about anger, sadness and fear, and we added a fourth item about disappointment. We tested the new items in a pilot study among sixteen teachers (56% male; average age was 47.3 years). Following the pilot study, the items including fear were removed from the scales because the distribution of the answers was too skewed (94% of the participants answered "never" and 6% answered "sometimes" to "I pretend to be afraid of a student"; 63% answered "never"; 19% answered "sometimes" and 19% answered "regularly" to "I make an effort to actually feel fear"). The resulting scale for surface acting of negative emotions contained three items, e.g. "I pretend that I am angry

with a student". For deep acting of negative emotions three items remained, e.g. "I work

hard to feel really disappointed".

Results

Structure of the D-QEL. In order to be able to test the factorial validity of the scale, a

confirmatory factor analysis has been conducted with the AMOS 3.6 computer program.

A six-factor model has been formulated in which the items were linked to their respective

factors. In order to decide whether the six-factor model fitted the data, the Comparative

Fit Index (CFI) was used, for which the research findings show that it is relatively

independent of the sample size taken at random (Bentler, 1990). Following the

recommendations of Bentler and Bonett (1980), the fit of a model was considered to be

acceptable if CFI exceeded .90. Results of the confirmatory factor analysis showed that

the six-factor model fitted the data well (null model: $\chi^2(153) = 1779.24$; six-factor model:

$\chi^2(120) = 286.44$, CFI = .90; RMR = .04; GFI = .92). However, inspection of the

standardized regression coefficients showed that item DAN18, deep acting of anger,

loaded poor on the factor (.26). After this item was deleted, the model fit improved

significantly ($\Delta\chi^2(16) = 41.56$, p < .001), and was acceptable according to the criterion

proposed by Bentler and Bonett (1980; null model: $\chi^2(136) = 1718.09$; six-factor model:

$\chi^2(104) = 244.88$, CFI = .91; RMR = .04; GFI = .93). Table 1 shows the standardized

regression coefficients of the six-factor model that can be interpreted as factor loadings.

The lowest value of the standardized regression coefficients was .52, which implies that

the items loaded well on the factors in question.

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Insert Table 1 about here

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Examination of the Cronbach's alpha values of the six resulting subscales of the extended D-QEL confirmed that three scales had sufficiently high reliabilities: surface acting positive (5 items) $\alpha = .74$ ($n = 390$), deep acting positive (3 items) $\alpha = .73$ ($n = 389$), and deep acting negative $\alpha = .73$, ($n = 395$) (Nunnally & Bernstein, 1994). The reliabilities of emotional consonance (2 items) $\alpha = .63$ ($n = 398$) and surface acting of negative emotions (3 items) $\alpha = .64$ ($n = 397$) were modest. The reliability of suppression (2 items, ersup20 removed), was low $\alpha = .52$ ($n = 390$).

Description of the sample. Table 2 presents the observed levels of emotional labor in the two subsamples.

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Insert Table 2 about here

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We conducted independent-samples t-tests to compare the emotional labor scores for experienced and inexperienced teachers using a Bonferroni adjusted alpha level of .01. Experienced teachers reported significantly more surface acting of negative emotions then inexperienced teachers, $M = 5.60$, $SD = 1.6$ and $M = 5.18$, $SD = 1.5$, respectively, $t(395)$, $p = .01$. Experienced teachers also reported significantly more deep acting of negative emotions then inexperienced teachers, $M = 3.01$, $SD = 1.5$ and $M = 2.58$, $SD = 1.0$, respectively, $t(395)$, $p = .001$. Furthermore, experienced teachers reported

significantly more emotional consonance then inexperienced teachers, $M = 7.61$, $SD = 1.2$ and $M = 7.08$, $SD = 1.3$, respectively, $t(396) = 3.87$, $p < .001$. There were no significant differences in scores for experienced and inexperienced teachers for surface acting, deep acting and suppression.

Relation between emotional labor strategies. Table 3 presents the correlations between the emotional labor strategies of the complete sample. Surface acting of positive and surface acting of negative emotions are correlated, $r = .38$, and deep acting of positive and deep acting of negative emotions are also highly correlated, $r = .52$. Surface acting is furthermore related to deep acting, $r = .40$, and surface acting of negative emotions was also related to deep acting of negative emotions, $r = .20$.

Insert Table 3 about here

Discussion

The primary aim of this study was to investigate whether and to what extent teachers engage in surface and deep acting of negative emotions. We developed two new scales with discrete negative emotions and submitted them to a confirmatory factor analysis to assess whether they overlapped with psychometrically existing scales or formed new scales. The three items of surface acting of negative emotions loaded on a distinct factor, thus supporting Hypothesis 1a. This finding corresponds with the support found by Glomb and Tews (2004) for their scale that measures the faking of negative emotions. Two items of deep acting of negative emotions loaded on a distinct factor, thus

supporting Hypothesis 1b. To the authors' knowledge, there is no other scale that

measures deep acting of negative emotions..

Further, respondents reported interpretation problems with regard to the items of

deep acting and deep acting of negative emotions by asking "Does *I work hard to* or *I*

make an effort to mean that I'm not yet capable of doing this?" As opposed to the deep

acting scales, the items of the scales of surface acting, surface acting of negative

emotions and suppression ask very specifically about the strategy that is used, e.g. "I put

on a "mask" in order to express the right emotions for my job" (surface acting) and "I

hide my anger about something someone has done" (suppression). The items of deep

acting and deep acting of negative emotions do not contain exact descriptions of how the

desired emotions are induced or shaped. It would be interesting for future research to

develop deep acting items which specify the way to induce or to shape the desired

emotions. In this context, one could think of the technique *trained imagination* mentioned

by Hochschild (1983) or the cognitive strategy *reappraisal* which "involves cognitively

transforming the situation so as to alter its emotional impact" (Gross, 1998, p. 284).

The second aim of this study was to investigate whether inexperienced teachers

differ from experienced teachers in their use of negative emotions. Hypothesis 2a was

confirmed as inexperienced teachers reported less surface acting of negative emotions

then their experienced colleagues. Hypothesis 2b was also confirmed. According to

Sutton and Wheatley (2003), some teachers feel guilty or conflicted when they express

anger to students. Beginning teachers might even ask themselves if they are allowed to be

angry (Sutton, 2000). Moreover, teachers are advised that "calm is strength; upset is

weakness" (Wong & Wong, 1998, p. 164). So it is not surprising that inexperienced

teachers, in an uncertain situation, use less surface acting and less deep acting of negative emotions.

Limitations and directions for future research

There are several limitations of this study that should be discussed. First, we used a cross-sectional survey to study the relationship between emotional labor variables and burnout symptoms.

Second, the response rate amongst teachers (11.6%) and student teachers (about 16%) in this study is rather low. Before starting this research we were aware of the fact that both the teacher and the student populations very often receive requests to complete questionnaires, and are less and less willing to do so. This lack of willingness might have caused some bias and diminished the representativeness of our sample. Moreover, teachers working in Amsterdam, Rotterdam, Utrecht and The Hague, the four largest Dutch cities, are not represented in our sample. Teaching in segregated schools in the suburbs of these cities is considered to be specially problematic (Paulle, 2005). Further research including these cities is recommended.

Conclusions

The scale surface acting of negative emotions turns out to be a useful extension of the D-QEL for the research of emotional labor for those professions where the elements of correction or sanctioning are of vital importance. Further research on the factorial and construct validity of the scale is highly recommended.

This study demonstrated that experienced and inexperienced teachers differ in the use of negative emotions. Inexperienced teachers use less surface acting of negative emotions then their experienced colleagues and they experience less emotional

consonance. Our next step will be to investigate how this difference in the use of

emotional labor is related to measures of work-related well-being.

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Table 1

Results of confirmatory factor analysis.

	Factors					
Item	SA	DA	EC	SUP	SAN	DAN
SA2	.70	-				
SA4	.68	-				
SA1	.62	-				
SA3	.61	-				
SA5	.54	-				
DA8		.84				
DA7		.73				
DA6		.52				
EC9			.73			
EC10			.65			
SUP12				.60		
SUP11				.59		
SAN14					.65	
SAN15					.64	
SAN13					.58	
DAN16						.83
DAN17						.68

Note. SA: Surface Acting; DA: Deep Acting; EC: Emotional Consonance;

SUP: Suppression; SAN: Surface Acting Negative; DAN: Deep Acting Negative

Table 2

Demographic variables and emotional labor of inexperienced and experienced teachers

Variabele	Range	M	SD	n	Range	M	SD	n
	Inexperienced teachers (n = 123)				Experienced teachers (n = 276)			
Demographic variables								
Gender	-	-	-	123	-	-	-	276
Age	18-51	26.2	7.1	123	26-64	47.7	10.1	276
Working hours per week	-	-	-	-	13-42	35.4	7.5	265
Years of experience in the profession	-	-	-	-	4-43	19.2	11.7	273
Emotional labor								
Surface acting	5-21	10.4	3.4	119	5-24	10.3	3.3	271
Deep acting	3-13	5.9	2.1	122	3-12	5.8	2.3	267
Suppression	2-9	4.2	1.2	123	2-9	4.3	1.3	274
Emotional consonance	4-10	7.1	1.3	122	3-10	7.6	1.2	276
Surface acting of neg. emotions	3-12	5.2	1.5	123	3-12	5.6	1.6	274
Deep acting of neg. emotions	2-10	2.6	1.0	123	2-8	3.0	1.5	272

Table 3

Correlations of various forms of emotional labor

Variable	1	2	3	4	5	6	7
1. Age	-						
2. Surface acting	.02	-					
3. Deep acting	.00	.40**	-				
4. Suppression	.00	.36*	25**	-			
5. Emotional consonance	.03	-.09*	-.08	-.12**	-		
6. Surface act. neg. emotions	.11*	.38**	.16**	.10*	.06	-	
7. Deep acting neg. emotions	.17**	.23**	.52**	-.02	-.03	.20**	-

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

Appendix A

Items of the extended version of the D-QEL

SA1	I put on a show at work
SA2	I put on a "mask" in order to express the right emotions for my job
SA3	I pretend to have the emotions I need to display for my job
SA4	I put on an act in order to deal with students in an appropriate way
SA5	I fake a good mood
DA6	I work hard to feel the emotions that I need to show to others
DA7	I make an effort to actually feel the emotions I need to display toward others
DA8	I work at conjuring up the feelings I need to show to students
EC9	I react to patients' emotions naturally and easily
EC10	I easily express positive emotions to patients as expected for my job
SUP11	I hide my anger about something someone has done
SUP12	I hide my disgust over something someone has done
SAN13	I pretend that I am disappointed in a student
SAN14	I pretend that I am angry with a student
SAN15	I pretend that a student is making me feel sad
DAN16	I work hard to feel really disappointed
DAN17	I work hard to actually feel sad