

Thought Question: Does it matter what passion looks like in teaching related to teacher well-being?

Research Article:

Harmonious Passion and its Relationship with Teacher Well-being.

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Teacher well-being can be positively or negatively influenced depending on the type of passion a teacher exhibits. Passion (as defined here), “a strong inclination towards a self-defining activity/object that one likes/loves” is identified as either harmonious passion (HP) or obsessive passion (OP). HP involves an activity that is loved and voluntarily becomes part of a teacher’s identity, while OP plays out as an obligatory and involuntary response-usually to avoid something such as judgement, guilt, negative consequences, etc. Teachers who engage in HP experience a “flow” during the enjoyed activity, while those engaged in OP feel stuck, robbing them of the same “flow” experience, thus creating the circumstances for negative well-being to take shape.

So, what are the implications for education?

If teachers are engaged in OP while teaching or participating in school-related tasks, what are the outcomes the ramifications? What is the impact on students, colleagues, themselves, relationships, learning experiences, and learning environments?

- OP “narrows cognition and motivation” while HP “expands the cognitive processes and motivational resources”
- HP is linked with “positive affect, life satisfaction, subjective vitality and reduced depression and anxiety” while OP leads to “distress, lack of relationships with positive indexes, depression, and anxiety”
- Student behavior can be positively influenced by both kinds of passion, which might make OP less recognizable until negative consequences begin to emerge
- HP is positively correlated with job satisfaction, while OP is a determinant for teacher burn-out
- HP can prevent and reduce teacher stress

Keywords: teacher stress, burn-out, passion, job satisfaction, teacher depression, teacher anxiety

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Harmonious passion and its relationship with teacher well-being



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HIGHLIGHTS

- Measured harmonious (HP) and obsessive (OP) passion in teachers.
- HP but not OP related with well-being dimensions.
- HP is affected by job satisfaction, positive affect, and self-efficacy.
- Primary school teachers are more passionate.

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ABSTRACT

This research examined the relationships between passion for teaching and teachers' well-being distinguishing between Harmonious Passion (HP), characterized by free acceptance of the activity in one's identity, and Obsessive Passion (OP), moved by perceived obligation. 379 primary, middle, and high school teachers participated. They filled in questionnaires to assess HP, OP, job satisfaction, teaching praxes, positive and negative affect, subjective happiness, and self-efficacy twice at a 3-months interval. HP related to all the adaptive aspects measured. HP at Time 2 was affected by job satisfaction, positive affect, and self-efficacy at Time 1. Suggestions for improving teachers' well-being are provided.

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1. Introduction

There is a growing interest in teachers well-being and its correlates. Well-being has been found to relate with engagement (e.g., Parker, Martin, Colmar, & Liem, 2012), and extra work (Kurland & Hasson-Gilad, 2015), to reduce burn-out (e.g., Skaalvik & Skaalvik, 2010), and to foster teachers' emotion regulation (e.g., Cheung & Lun, 2015; Taxer & Frenzel, 2015) with positive effects for both teachers and their students (Tennant et al., 2015). Whereas some contextual variables can play a role (e.g., Mansfield, Beltman, Price, & McConney, 2012), the results from large scale investigations such as the Teaching and Learning International Survey (OECD, 2014) suggest that mainly psychological individual factors matter.

Among them, recently, Renshaw, Long, and Cook (2015) stressed the importance of positive indicators of teachers well-being focused on happiness, growth, and health, following a positive

psychology perspective (Diener, 2000). The most studied are job satisfaction (e.g., Mattern & Bauer, 2014; Yildirim, 2015), and those proposed by the van Horn, Taris, Schaufeli, and Schreurs (2004) occupational well-being theory: affective, professional, social, cognitive and psychosomatic dimensions such as positive affect, and self-efficacy. In addition some studies (e.g., Chan, 2009, 2013; Forest et al., 2012) found that also some emotional and cognitive strengths such as hope, zest, gratitude, and forgiveness relate with dimensions of subjective well-being.

This research will consider an underexplored factor: passion for teaching either harmonious or obsessive, following the model proposed by Vallerand et al. (2003), below described. The rationale behind is that – being harmonious passion a motivational strength linked with many positive aspects – it will empower teachers and foster their well-being. These relationships will be examined in this study by considering a range of aspects, beyond job satisfaction, namely positive and negative affect, teaching praxes, subjective happiness, and self-efficacy, and assessing them twice, at a 3-months interval, so that to ascertain which factors most affect

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teachers passion. A further aim will be to test differences in passion due to type of school, age and years of teaching, which have never been explored before.

1.1. *The Dualistic Model of Passion*

Passion has been defined as a strong inclination toward a self-defining activity (or object) that one likes (or even loves), finds important, and in which he/she devotes time and energy on a regular basis (Vallerand et al., 2003). Passion make people engaged and involved, and favor enduring effects causing positive or negative outcomes depending on the kind of passion, as depicted by the Dualistic Model of Passion (DMP) which distinguishes between Harmonious Passion (HP) and Obsessive Passion (OP) (Vallerand et al., 2003). HP derives from an autonomous internalization of a loved activity into a person's identity. The passionate activity is freely chosen, interacts harmoniously with various aspects of life, is perceived under the control of the person, who experience positive affect when engaging in it. OP is a strong inclination towards an activity that has been internalized into a person's identity in a controlled way. It is characterized by feelings of being obliged to carry out a certain task, being moved by the urge to be accepted or positively judged, a desire to demonstrate ability, increase self-esteem (e.g., Crocker & Park, 2004), avoid guilt and enhance self-worth, or by the sense of excitement deriving from performing the activity.

OP tends to narrow cognition and motivation and to favor the occurrence of maladaptive outcomes such as negative affect, rigid persistence, too much work, family or work-related conflicts due to the difficulty in stopping from engaging in the passionate activity (for a review see Vallerand, 2008). On the opposite, HP tends to expand the cognitive processes and motivational resources, and leads to an adaptive pattern of results, such as higher work satisfaction, and reduced risk of burnout (Vallerand, Paquet, Philippe, & Charest, 2010), academic engagement (Stoerber, Childs, Hayward, & Feast, 2011), increased positive affect and decreased negative affect (Mageau & Vallerand, 2007), and higher use of signature strengths (Forest et al., 2012).

1.2. *Harmonious passion and well-being*

The DMP has been studied with a range of populations and life situations, such as sports (e.g., Vallerand et al., 2008), pathological gambling (Philippe & Vallerand, 2007), and successful aging (e.g., Rousseau & Vallerand, 2008), demonstrating that HP but not OP or lack of passion favors well-being, positive affect, and subjective vitality in both genders and various age groups (Philippe, Vallerand, & Lavigne, 2009).

While engaging in the passionate activity and after having engaged in an activity out of HP people experience positive affect, life satisfaction, subjective vitality, and reduced depression and anxiety. On the opposite, OP leads to distress, which means lack of relationships with positive indexes and positive relations with depression and anxiety (Philippe, Vallerand, Houffort, Lavigne, & Donahue, 2010; Philippe et al., 2009; Rousseau & Vallerand, 2008). In addition, HP has been shown to be linked with experience of flow during the activity, while OP is related with rumination while engaging in a different activity, which prevents the flow experience to occur thus affecting negatively well-being (Carpentier, Mageau, & Vallerand, 2012). Moreover, OP leads to an internal pressure to perform the activity and to rigid persistence which further prevent to experience well-being (Vallerand et al., 2003). This study aimed at testing the hypothesis that HP will relate with various facets of well-being in teachers, while OP will not or will relate negatively.

1.3. *Passion for teaching*

Passion has been considered “essential to all good teaching” (Day, 2004, p. 11), because it is a motivational force which could favor teachers well-being and which affect students motivation (Patrick, Hisley, Kempler, & College, 2000), enjoyment (Frenzel, Goetz, Lüdtke, Pekrun, & Sutton 2009), and achievement (Moè, 2016). Nevertheless, little research has been devoted to consider passion for teaching (Carbonneau, Vallerand, Fernet, & Guay, 2008; Fernet, Lavigne, Vallerand, & Austin, 2014; Lavigne, Forest, Fernet, & Crevier-Braud, 2014; Trépanier, Fernet, Austin, Forest, & Vallerand, 2013). Carbonneau et al. (2008) examined job satisfaction, positive student behavior, and burn-out in primary, high school and adult education teachers. Both kinds of passion were found to relate to positive student behavior, but only HP related positively with job satisfaction and negatively with burn-out. Trépanier et al. (2013) found that in both teachers and nurses HP partially mediated the relationships between job demand/resources and burnout/work engagement. Lavigne et al. (2014) found that HP led to positive evaluations of job support, and control, while OP led to perception of work overload in primary, high school and adult education teachers. Fernet et al. (2014) outlined the importance of job autonomy in predicting HP and OP (negatively), which in turn affected burnout. All these studies focused mainly on job related factors: job satisfaction, job resources, job support, and job autonomy showing that HP is a protective factor, because it enhances well-being and reduces work related stress and burn-out (Skaalvik & Skaalvik, 2009). However, relationships with other aspects linked with teachers well-being and teaching deserve to be studied.

The first aspect is affect – either positive (e.g., interest, excitement) or negative (e.g. anger, sadness) – which has a central role in shaping teachers adjustment to school challenges (Hargreaves, 1998), and which is a core component of hedonic well-being (Diener, 2000). The second aspect is the teachers' self-reported use of praxes related to teaching and motivating students such as 'Review topics to be covered in the following oral tests or written essays with the students', and 'Encourage students who fail'. Moè, Pazzaglia and Ronconi (2010) have demonstrated positive relationships between this variable and some well-being indicators: positive affect, job satisfaction, and self-efficacy. The third aspect is subjective happiness – self-rated in comparison with other people – which is a central aspect of well-being (Lyubomirsky, Sheldon, & Schkade, 2005). The fourth aspect is teachers' self-efficacy defined as situation-specific confidence in being able to teach, manage the classroom, support students needs, and help them to learn, achieve, and motivate (Bandura, 1997), which is one of the major sources of motivation and commitment in all aspects of teaching (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998).

To the best of our knowledge, until now, the relationships between teachers' passion and self-efficacy, subjective happiness, positive and negative affect, and teacher praxes have never been assessed. Harmonious passion is an energizing factor which should be linked with well-being (positive affect, reduced negative affect, and subjective happiness), and teachers' adoption of a wide variety of teaching praxes and self-efficacy in face of challenges. So it is predicted that HP, but not OP will relate with all the positive aspects considered, while negative relations are expected with negative affect, which should relate with OP, a result found mainly in the sport realm. Then it is predicted, considering HP and OP measured 3-months later, that job satisfaction, positive affect, self-efficacy, subjective happiness, and teaching praxes are all factors which affect HP, but not OP. Finally differences among primary, middle, and high school teachers will be examined. Given that this is the first time that the relationships between passion and a large number of facets of well-being are examined in teachers a

correlational approach was adopted.

2. Method

2.1. Participants

A convenience sample of three hundred and seventy-nine teachers from 11 Italian schools participated on a voluntary basis. They were teaching in primary (4 schools, $n = 139$, 36% of whole sample, $n = 114$ women), middle (3 schools, $n = 97$, 26%, $n = 55$ women) and high schools (4 schools, $n = 143$, 38%, $n = 79$ women). Their age ranged from 25 to 64 ($M = 45.07$ yrs, $SD = 8.87$). Their mean number of years of teaching was 18.86, $SD = 10.38$, ranging from 1 to 40. The subjects taught varied: first and second languages, mathematics, history, science, chemistry, visual arts, geography, music, technological applications, religion, and physical education. Of the original sample of 379 teachers, 218 took part at the second data collection 3 months later. The response rate was 58%. Seventy-five (36%, $n = 61$ women) were teaching in primary, 59 (29%, $n = 30$ women) in middle, and 73 (35%, $n = 35$ women) in high schools. One teacher did not state type of school and gender. The scores obtained by the participants who completed the questionnaires at both the measurement points did not differ from those of the teachers who participated only at the first submission, except for subjective happiness, $t(328) = 2.67$, $p = 0.008$ (both measurement points $M = 5.24$, $SD = 1.07$; just the first compilation $M = 4.93$ $SD = 1.03$).

2.2. Instruments and procedure

After having obtained the permission from the school heads, all the teachers of agreeing schools were contacted. The following questionnaires were delivered in the order given, and collected in the schools by the same researcher who stayed here and gave help, if required. Teachers were reassured that the responses were anonymous. No time limit was set. The booklet was completed in about 30 min.

2.2.1. Passion scale adapted for teaching

The instrument proposed by Carbonneau et al. (2008) was translated into Italian and then back-translated to check for accuracy of translation. It contains 16 items. Four items assessed Passion, following its definition: value given to the activity, amount of time devoted to it, and pleasure deriving from it (example item, 'I like my job as a teacher'). Cronbach's alphas were 0.76 at Time 1 (T1), and 0.82 at Time 2 (T2). Then, a mean score of Passion was obtained by summing the four ratings and dividing by four.

The following 12 items measured the two kinds of passion: HP (example, 'My job as a teacher is in harmony with the other activities in my life') and OP (example, 'I have almost an obsessive feeling for my job as a teacher'). Respondents were asked to rate each on a 7-point Likert-type scale ranging from '1' = 'do not agree at all' to '7' = 'very strongly agree'. A Confirmatory Factor Analysis (CFA) was run to verify the two-factor solution of the Passion Scale, considering the whole sample at T1. Six items were considered as indicators of HP, six of OP, following the key reported by Carbonneau et al. (2008). An initial analysis showed that two items ("My job as a teacher reflects the qualities I like about myself" and "I have the impression that my job as a teacher controls me") saturated less than 0.30, respectively 0.23 and 0.25, and were not considered further.

In addition, the following correlations were made free, in order to increase the model fit: item 5 ("My job as a teacher is in harmony with the other activities in my life") with 12 ("My job as a teacher is well integrated in my life"), $r = 0.15$, item 6 ("I have difficulties

controlling my urge to do my job as a teacher") with 8 ("I have almost an obsessive feeling for my job as a teacher"), $r = 0.20$, item 6 with 15 ("My job as a teacher is so exciting that I sometimes lose control over it"), $r = 0.28$, and item 10 ("My job as a teacher allows me to live a variety of experiences") with 15, $r = 0.16$. The values obtained on the 10 items passion scale were RMSEA = 0.09 (CI 0.08–0.11), CFI = 0.94, GFI = 0.93, NFI = 0.92, NNFI = 0.90. For RMSEA, a value of 0.06 or less reflects a good fit, and of 0.09 or less an acceptable fit (Hu & Bentler, 1999). For CFI, GFI, NFI and NNFI, values of 0.90 or greater are considered acceptable, and 0.95 or higher as indicating a good fit to the data. Considering all the indexes, the fit was acceptable.

Hence, two scores were computed: HP, by summing items 5, 7, 10, 12 and 14, and dividing by 5, Cronbach alphas 0.72 and 0.77 (respectively at T1 and T2), and OP, by summing items 6, 8, 11, 13 and 15, and dividing by 5, Cronbach alphas 0.79 and 0.81 (respectively at T1 and T2). These values were close to those found by Carbonneau et al. (2008), ranging from 0.76 to 0.87. Test retest correlations were 0.67 and 0.65 respectively for HP and OP.

2.2.2. Job satisfaction scale

Among the various instruments developed to measure job satisfaction in teachers (e.g. the Job Descriptive Index of Smith, Kendall, & Hulin, 1969, and the Work Satisfaction Scale of Hackman & Oldham, 1975), we decided to use the Job Satisfaction Scale (Moè et al., 2010), a revised version of the SWLS (Diener, Emmons, Larsen, & Griffin, 1985) already used with teachers and obtained by replacing 'life' with 'job'. It provides a global evaluation pertaining not to specific aspects maybe linked with facilities or specific contextual factors, but referred to the closeness between the actual and the ideal self (Diener et al., 1985), that is the teacher one perceives to be and the ideal teacher. The scale is composed of five items (example 'I am satisfied with my job') to be answered along a 7-point Likert-type scale, ranging from '1' = 'strongly disagree' and '7' = 'strongly agree'. Scores were computed by summing the five ratings given and dividing by 5. Cronbach alphas for this sample were 0.73 at T1 and 0.83 at T2, close to those of the validation: 0.84.

2.2.3. Teaching praxes

The Praxis scale (Moè et al., 2010) was used. It lists 25 good praxes (example items 'Create links with topics already explained when introducing a new one', 'Review topics to be covered in the following oral tests or written essays with the students'), which refer to many aspects of teaching irrespective of the subject taught. The underlying construct is how much teachers self-report to adopt a wide range of strategies. A higher score mean greater use of different strategies, maybe in a flexible way depending on topics covered, students understanding, aims (e.g., introducing a new topic or reviewing it before an essay). The large the variety of praxes adopted the better the teaching. Respondents were asked to rate how frequently they used each praxis on a 5-point scale, ranging from '1' = 'almost never' to '5' = 'almost always'. Scores were computed by summing the 25 ratings given and dividing by 25. Cronbach alphas for this sample were 0.80 at T1 and 0.83 at T2, the same of the validation.

2.2.4. Positive affect negative affect scale (PANAS)

The Italian validation (Terracciano, McCrae, & Costa, 2003) of the PANAS scale devised by Watson, Clark, and Tellegen (1988) was used to assess the two independent dimensions of Positive Affect and Negative Affect. Respondents were asked to rate on a 5-point Likert-type scale how they felt now each of the listed affective states, from very slightly to very much. Ten items were labels of positive affect (e.g., excited, enthusiastic) and the other 10 of

negative affect (e.g., afraid, upset). Two scores were computed: positive affect (sum of 10 positive affect items divided by 10) and negative affect (sum of 10 negative affect items divided by 10). Cronbach's alphas for this sample were: positive affect 0.80 (T1) and 0.83 (T2), negative affect 0.84 (T1) and 0.86 (T2).

2.2.5. Subjective happiness scale

The scale devised by Lyubomirsky and Lepper (1999) was translated into Italian and then back-translated to check translation accuracy. It contains 4 items (example 'In general, I consider myself a very happy person') assessing happiness to be rated on a 7-point Likert-type scale from '1' = 'not at all' to '7' = 'a great deal'. Scores were computed by summing the four ratings given and dividing by four, after having reversed the score of one item reverse coded. Cronbach alphas were 0.72 at T1 and 0.79 at T2, close to those reported by Lyubomirsky and Lepper (1999), from 0.79 to 0.94, depending on sample considered.

2.2.6. Self-efficacy scale

The Italian version (Moè et al., 2010) of the Ohio State Teacher Efficacy Scale (OSTES: Tschannen-Moran & Woolfolk Hoy, 2001) was adopted. Teachers were asked to indicate how capable they felt in adequately managing each of the 24 typical challenging teaching experiences pertaining to (a) instructional strategies (example item 'To what extent can you use a variety of assessment strategies?'), (b) classroom management (example item "How much can you do to calm a student who is disruptive or noisy?"), and (c) student engagement (example item 'How much can you do to help your students think critically?') on a 9-point Likert-type scale, ranging from '1' = 'not able to manage at all' to '9' = 'fully able to manage'. Tschannen-Moran and Woolfolk Hoy (2001) found that a one-factor solution explained more variance than a three-factor. The same result was obtained in an Italian sample (Moè et al., 2010), so that here a single score was computed by summing the 24 ratings given by participants and dividing by 24. Cronbach alphas were 0.96 and 0.97 respectively at T1 and T2, even higher than those found by Tschannen-Moran and Woolfolk Hoy (2001), and Moè et al. (2010), respectively 0.94 and 0.90.

A final page asked for details of teachers' age, years of teaching, gender, type of school, subject taught, and, at T1, reminded them about the second part of the study. A short debriefing was also given, together with the researchers' thanks to participants.

About half the teachers (58%) were tested first in March then in June, the others first in June than in September.

3. Results

3.1. Relationships among variables and descriptive statistics

Means, standard deviations and correlations among variables at T1 were calculated. All the adaptive aspects, namely job satisfaction, positive affect, teaching praxes, subjective happiness, and self-efficacy related each other ($0.15 < r < 0.50$, $p < 0.01$). Negative affect correlated negatively with job satisfaction ($r = -0.17$, $p < 0.01$) and with subjective happiness ($r = -0.27$, $p < 0.001$). HP and OP were correlated with each other, $r = 0.24$, $p < 0.001$. Hence, inter-correlations with job satisfaction, positive and negative affect, teaching praxes, subjective happiness and self-efficacy were calculated first, considering HP and partialing out OP, and then considering OP and partialing out HP. Table 1 lists the partial correlations involving HP and OP, together with descriptive statistics and Z-scores.

The same relationships were calculated separately for the three levels of primary, middle, and high school teachers. It emerged that all the variables related with HP in the expected direction in the

Table 1

Partial correlations involving Harmonious (HP) and Obsessive (OP) Passion at Time 1 ($n = 282$) and descriptive statistics.

Variable (scores range)	<i>M</i>	<i>SD</i>	<i>HP</i>	<i>OP</i>	Z score, and <i>p</i>
Job satisfaction (1–7)	4.69	0.96	0.48 **	0.02	5.94, $p < 0.001$
Teaching praxes (1–5)	4.17	0.36	0.15*	0.11	0.48, <i>ns</i>
Positive affect (1–5)	2.99	0.58	0.32 **	0.16**	2.01, $p = 0.022$
Negative Affect (1–5)	1.47	0.50	-0.29 **	0.28 **	6.92, $p < 0.001$
Subjective happiness (1–7)	5.06	1.11	0.41 **	-0.15 *	6.93, $p < 0.001$
Self-efficacy (1–9)	7.08	0.99	0.32 **	0.06	3.21, $p < 0.001$
HP (1–7)	5.23	0.85			
OP (1–7)	3.57	1.08			

Note. * = $p < 0.05$, ** = $p < 0.01$.

three sub-groups except 'teaching praxes' which did not relate with HP in middle school teachers. OP did not relate with subjective happiness in any of the sub-groups, positive affect related with OP only for primary school teachers, negative affect for all the sub-groups.

The hypothesis that HP but not OP was associated with adaptive outcomes was confirmed. In fact, OP related only once to an adaptive outcome, i.e., positive affect, but this relationship was significantly lower than that with HP ($Z = 2.01$, $p = 0.022$), and significant only for the sub-group of primary school teachers. OP also related negatively with one adaptive outcome, subjective happiness, and positively with negative affect. In contrast, HP related to all five adaptive aspects (job satisfaction, teaching praxes, positive affect, subjective happiness, self-efficacy) and negatively with negative affect. In addition, the Z scores confirmed that all correlations involving HP differed from the significant ones involving OP.

3.2. Predictors of harmonious and obsessive passion

Two hierarchical regression analyses were conducted having HP and OP at T2 as dependent variables. First HP and OP were considered among the predictors. They explained respectively 45% and 41% of the variance and no other predictor increased the variance explained. This is not surprising, in the three months the two measures are linked as the test-retest shows (see section Instruments and Procedure). So a new series of hierarchical regression analysis was run without the predictors HP and OP.

The predictors were entered in the hierarchical regression analysis in the following order: job satisfaction, positive affect, self-efficacy, subjective happiness, and teaching praxes. Job satisfaction was entered the first, because previous studies showed that it related with HP in teachers. As shown in Table 2, it explained 18% of the variance. The second was positive affect, because relationships with HP have been demonstrated in previous researches, but never with teachers. The results showed 4% additional variance explained. Then the other three factors never considered in previous studies assessing the relationships between HP and well-being were added. Self-efficacy proven to be a significant predictor and overall the variance explained was 26%. All the models were significant with $F_s > 12.30$, and $p < 0.001$. This confirms that job satisfaction, positive affect, and self-efficacy are significant predictors, but also points to the fact that other unexplored factors matter and that neither subjective happiness nor teaching praxes are significant predictors of HP. The same hierarchical regression analysis was run having OP as dependent variable, but none of the considered relationships turned out to be significant.

3.3. Differences due to demographic characteristics

Nine one-way ANOVAs were conducted on Passion, HP, OP, job

Table 2
Effects of job satisfaction, positive affect, self-efficacy, subjective happiness, and teaching praxes at T1 on HP at T2.

Predictors	β	t	p	R^2
Step 1 Job satisfaction	0.43	6.00	<0.001	0.18
Step 2 Job satisfaction	0.38	5.48	<0.001	0.22
Positive affect	0.23	3.33	0.001	
Step 3 Job satisfaction	0.37	5.35	<0.001	0.25
Positive affect	0.19	2.65	0.009	
Self-efficacy	0.19	2.73	0.007	
Step 4 Job satisfaction	0.34	4.83	<0.001	0.26
Positive affect	0.17	2.38	0.019	
Self-efficacy	0.16	2.24	0.026	
Subjective happiness	0.10	1.35	ns	
Step 5 Job satisfaction	0.34	4.84	<0.001	0.26
Positive affect	0.18	2.47	0.015	
Self-efficacy	0.20	2.35	0.020	
Subjective happiness	0.10	1.32	ns	
Teaching praxes	-0.07	-0.86	ns	

satisfaction, teaching praxes, positive and negative affect, subjective happiness, and self-efficacy comparing the means of primary, middle, and high school teachers. Primary school teachers adopted more teaching praxes ($M = 4.26$) and had higher negative affect scores ($M = 1.55$) than middle (praxes $M = 4.17$; negative affect $M = 1.45$) and high school teachers (praxes $M = 4.07$; negative affect $M = 1.37$), $F(2, 335) = 9.19, p < 0.001$ and $F(2, 344) = 3.65, p = 0.027$ respectively for teaching praxes and negative affect. No significant difference was found either for HP or OP. Nine Student t -tests explored gender differences. After Bonferroni correction, it emerged that women ($M = 4.20$) adopted more teaching praxes than men ($M = 4.10$), $t(334) = 2.46, p = 0.014$, and were more passionate (women $M = 6.12$, men $M = 5.94$), $t(375) = 2.18, p = 0.030$. Age and years of teaching were highly correlated ($r = 0.85, p < 0.001$). None of them correlated with Passion, HP, or OP.

4. Discussion

Previous research outlined that HP, but not OP is related with positive outcomes in a range of populations (e.g., Carpentier et al., 2012; Philippe et al., 2009; Vallerand et al., 2003, 2008), and with job satisfaction, and other job related issues in teachers (Carbonneau et al., 2008; Fernet et al., 2014; Lavigne et al., 2014; Trépanier et al., 2013). However relationships with others positive indicators were not examined, notwithstanding their importance for teachers' well-being (Renshaw et al., 2015).

This research examined a wide range of factors which may be linked with passion for teaching, some of them never previously explored, in particular job satisfaction, positive and negative affect, teaching praxes, subjective happiness, and self-efficacy for teaching. The main aim was to extend existing research on passion by confirming the distinction between HP and OP in teachers and to identify aspects linked with HP but not OP. The second aim was to assess the predictors of HP and OP after a 3-month delay. The third was to examine differences due to demographic variables.

4.1. Overview of the results

The results obtained here confirm and extend previous ones about relationships and predictors of HP and OP in teachers. First, HP but not OP relates with job satisfaction, positive affect, subjective happiness, teaching praxes, self-efficacy and negatively with negative affect. This outline the adaptive value of HP compared with OP. Acting out of OP did not relate with job satisfaction, self-efficacy or teaching praxes, but was accompanied by an increase in negative affect and a decrease in subjective happiness. This

means that devoting time and resources out of HP is a fruitful effort, while acting out of OP is not. There was just one relationships of OP with a positive outcome: positive affect. While lower than that of HP with positive affect, it was significant, and probably due to the excitement deriving from the activity, teaching in this study, as suggested by Vallerand (2008). However, it must be noted that this positive relationship between OP and positive affect did not apply for middle and high school teachers, but only for primary school teachers. This suggest caution in interpreting it. Primary school teachers differed from both middle and high school teachers in teaching praxes, negative affect, and in some relationships, so that the conclusion is that positive affect related with HP and that only for one sub-group there was a positive, but smaller, relationship also with OP. Then it was found that the best predictors of HP and OP at T2 are HP and OP at T1, but also that job satisfaction, positive affect, and self-efficacy play a role.

4.2. Theoretical implications: passion for teaching and well-being

First, the distinction between HP and OP was confirmed. HP but not OP related to the positive outcomes examined in this sample of teachers. In addition, it has been showed, for the first time, that HP in teaching is linked not only to job satisfaction, perceived job support, and reduced burn-out as shown in previous studies (Carbonneau et al., 2008; Fernet et al., 2014; Lavigne et al., 2014; Trépanier et al., 2013), but also to positive affect, self-efficacy, subjective happiness, and teaching praxes. Secondly, HP and OP tended to maintain stable at least in the three-month span here considered. Teachers who are passionate are motivated to engage more and more with teaching, and if the passion is harmonious they derive positive affect, job satisfaction, self-efficacy, subjective happiness and a high use of a variety of teaching praxes. On the opposite if the passion is obsessive they increase their negative affect and do not derive wellbeing by their passion. Third, the vast majority of teachers turned out to have at least a medium level of passion, and they experienced more HP than OP, while there is no difference due to age, gender, and years of teaching. This result confirms and extends that of Carbonneau et al. (2008), showing that teaching is indeed a passionate activity for a large number of teachers. In addition, differences due to demographic variables were found here.

These results suggest that HP can be included among the factors which could prevent teachers' stress together with cognitive, behavioral, and emotional coping strategies, appraisal of external stressful events, and positive emotional responses (for a review see Montgomery & Rupp, 2005). In fact passion, in particular HP, is one of these emotional responses linked with job and life satisfaction which affect work commitment rather than avoidant responses, negative thinking, negative affect, and resignation, which are instead linked with OP.

The mean scores obtained with this Italian sample in both passion (HP = 5.23 and OP = 3.57) and well-being dimensions (job satisfaction, positive and negative affect were 4.69, 2.99, 1.47) are close to those found in studies in other countries: 4.92, 2.65, 4.44, 3.50, and 2.55 respectively for HP, OP, job satisfaction, positive and negative affect (Carbonneau et al. 2008; Chan, 2013). Moreover, the significant relationships among variables are the same. This confirms that the cultural context where the study was run is similar to those of other studies and suggests that the implications could be applied also in other countries.

4.3. Practical implications: fostering teachers' well-being and passion

Having assessed that three well-being factors (job satisfaction,

positive affect, and self-efficacy) are those most related with passion could help devising future intervention studies, for both initial and in-service teachers, whose effectiveness has been demonstrated in previous researches targeting mainly at reducing stress (e.g., Parker et al., 2012). Here the focus will be at well-being dimensions, such as positive affect, job satisfaction, and self-efficacy, which should be enhanced in order to favor HP.

Previous studies have shown that autonomy support favor HP (Mageau et al., 2009). The more an activity is chosen, valued, and close to the person identity, the higher the passion, mainly harmonious. In this process, autonomy support and personality factors play a critical role (Philippe & Vallerand, 2008). The more the competence, autonomy and relatedness needs of a person are supported (e.g., Mageau et al., 2009), and the more he/she has an autonomous orientation (Guay, Mageau, & Vallerand, 2003) the higher the probability to develop HP.

Here it has been found that some other aspects (probably linked to an autonomy supportive climate), namely job satisfaction, positive affect, and self-efficacy act on HP. This is an interesting result for scholars and practitioners wishing to promote teachers' positive attitudes and well-being. It is advisable, in order to increase passion, to act on one or more of the adaptive aspects to which it is related, maybe using an experimental approach with treated and no-treated teachers, whose effectiveness has been demonstrated in previous studies (e.g., Siu, Cooper, & Phillips, 2014).

Thus, the quality rather than the length of the intervention should be considered. In particular, with beginners teachers it has been shown that a constructivist rather than a transmissive learning approach is the most effective in fostering teachers' efficacy, satisfaction, and enthusiasm (Richter et al., 2013). This suggests that also in increasing the well-being dimensions and hence HP the same perspective should be adopted.

4.4. Limitations

First, this was a correlational study. Future research is needed to assess what happens when one or more of the aspects proven to be related with HP are acted upon. For instance, future research is needed to better understand the characteristics of a training aimed at improving passion. Secondly, all assessment instruments were self-reporting. To declare to be passionate could reflect social desirability. Notwithstanding the questionnaires were anonymous, this aspect could have caused over-estimation of Passion. Finally, the sample was mostly composed of females. This is not surprising because there are more women than men teachers in both primary, middle, and high school. This however could be a limitation given that women scored higher than men in two dimensions: overall passion, but not HP or OP, and teaching praxes.

4.5. Avenues for future research

Future research could consider also observational data and/or ratings provided by students. This may add information toward understanding relationships, predictors and complex dynamics, such as the relationship of teachers' passion with students' enjoyment, motivation, and perceived instructional quality (Frenzel et al., 2009).

The results of this study suggest that job satisfaction, positive affect, and self-efficacy affect HP and can reduce teachers stress. Future studies could address this point directly by acting on these three aspects and observing an increase in HP in studies targeted mainly to teachers having either high levels of OP or low levels of HP so that to reduce teachers' stress and foster their passion and well-being.

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References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Carbonneau, N., Vallerand, R. J., Fernet, C., & Guay, F. (2008). The role of passion for teaching in intrapersonal and interpersonal outcomes. *Journal of Educational Psychology, 100*(4), 977–987.
- Carpentier, J., Mageau, G. A., & Vallerand, R. J. (2012). Ruminations and flow: Why do people with a more harmonious passion experience higher well-being? *Journal of Happiness Studies, 13*, 501–518.
- Chan, D. W. (2009). The hierarchy of strengths: Their relationships with subjective well-being among Chinese teachers in Hong Kong. *Teaching and Teacher Education, 25*, 867–875.
- Chan, D. W. (2013). Subjective well-being of Hong Kong Chinese teachers: The contribution of gratitude, forgiveness, and the orientations to happiness. *Teaching and Teacher Education, 32*, 22–30.
- Cheung, F., & Lun, V. M. C. (2015). Emotional labor and occupational well-being: A latent profile analytic approach. *Journal of Individual Differences, 36*, 30–37.
- Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin, 130*, 392–414.
- Day, C. (2004). *A passion for teaching*. London: RoutledgeFalmer.
- Diener, E. (2000). Subjective well-being. The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34–43.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.
- Fernet, C., Lavigne, G. L., Vallerand, R. J., & Austin, S. (2014). Fired up with passion: Investigating how job autonomy and passion predict burnout at career start in teachers. *Work & Stress: An International Journal of Work, Health & Organisations, 28*, 270–288.
- Forest, J., Mageau, G. A., Crevier-Braud, L., Bergeron, E., Dubreuil, P., & Lavigne, G. L. (2012). Harmonious passion as an explanation of the relation between signature strengths' use and well-being at work: Test of an intervention program. *Human Relations, 65*(9), 1233–1252.
- Frenzel, A. C., Goetz, T., Lüdtke, O., Pekrun, R., & Sutton, R. E. (2009). Emotional transmission in the classroom: Exploring the relationship between teacher and student enjoyment. *Journal of Educational Psychology, 101*, 705–716.
- Guay, F., Mageau, G. A., & Vallerand, R. J. (2003). On the hierarchical structure of self-determined motivation: A test of top-down, bottom-up, reciprocal, and horizontal effects. *Personality and Social Psychology Bulletin, 29*, 992–1004.
- Hackman, J., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology, 60*, 159–170.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education, 14*(8), 835–854.
- van Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology, 77*, 365–375.
- Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling, 6*, 1–55.
- Kurland, H., & Hasson-Gilad, D. R. (2015). Organizational learning and extra effort: The mediating effect of job satisfaction. *Teaching and Teacher Education, 49*, 56–67.
- Lavigne, G. L., Forest, J., Fernet, C., & Crevier-Braud, L. (2014). Passion at work and workers' evaluations of job demands and resources: A longitudinal study. *Journal of Applied Social Psychology, 44*, 255–265.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137–155.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111–131.
- Mageau, G., & Vallerand, R. J. (2007). The moderating effect of passion on the relation between activity engagement and positive affect. *Motivation and Emotion, 31*, 312–321.
- Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S.-J., Lacaille, N., Bouffard, T., et al. (2009). On the development of harmonious and obsessive passion: The role of autonomy support, activity specialization, and identification with the activity. *Journal of Personality, 77*, 601–646.
- Mansfield, C. F., Beltman, S., Price, A., & McConney, A. (2012). "Don't sweat the small stuff": Understanding teacher resilience at the chalkface. *Teaching and Teacher Education, 28*, 357–367.
- Mattern, J., & Bauer, J. (2014). Does teachers' cognitive self-regulation increase their occupational well-being? the structure and role of self-regulation in the teaching context. *Teaching and Teacher Education, 43*, 58–68.
- Moè, A. (2016). Does displayed enthusiasm favour recall, intrinsic motivation and time estimation? *Cognition and Emotion, 30*.
- Moè, A., Pazzaglia, F., & Ronconi, L. (2010). When being able is not enough. The combined value of positive affect and self-efficacy for job satisfaction in

- teaching. *Teaching and Teacher Education*, 26, 1145–1153.
- 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*, 28(3), 458–486.
- OECD. (2014). *Talis 2013 results: An international perspective on teaching and learning*. OECD Publishing.
- Parker, P. D., Martin, A. J., Colmar, S., & Liem, G. A. (2012). Teachers' workplace well-being: Exploring a process model of goal orientation, coping behavior, engagement, and burnout. *Teaching and Teacher Education*, 28, 503–513.
- Patrick, B. C., Hisley, J., Kempler, T., & College, G. (2000). What's everybody so excited about? the effects of teacher enthusiasm on student intrinsic motivation and vitality. *Journal of Experimental Education*, 68(3), 217–236.
- Philippe, F., & Vallerand, R. J. (2007). Prevalence rates of gambling problems in Montreal, Canada: A look at old adults and the role of passion. *Journal of Gambling Studies*, 23, 275–283.
- Philippe, F., & Vallerand, R. J. (2008). Actual environments do affect motivation and psychological adjustment: A test of self-determination theory in a natural setting. *Motivation and Emotion*, 32, 81–89.
- Philippe, F. L., Vallerand, R. J., Houffort, N., Lavigne, G., & Donahue, E. G. (2010). Passion for an activity and quality of interpersonal relationships: The mediating role of emotions. *Journal of Personality and Social Psychology*, 98, 917–932.
- Philippe, F. L., Vallerand, R. J., & Lavigne, G. L. (2009). Passion does make a difference in people's lives: A look at well-being in passionate and non-passionate individuals. *Applied Psychology: Health and Well-Being*, 1(1), 3–22.
- Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). Assessing teachers' positive psychological functioning at work: Development and validation of the teacher subjective wellbeing questionnaire. *School Psychology Quarterly*, 30, 289–306.
- Richter, D., Kunter, M., Lüdtke, O., Klusmann, U., Anders, Y., & Baumert, J. (2013). How different mentoring approaches affect beginning teachers' development in the first years of practice. *Teaching and Teacher Education*, 36, 166–177.
- Rousseau, F. L., & Vallerand, R. J. (2008). An examination of the relationship between passion and subjective well-being in older adults. *International Journal of Aging and Human Development*, 66, 195–211.
- Siu, O. L., Cooper, C. L., & Phillips, D. R. (2014). Intervention studies on enhancing work well-being, reducing burnout, and improving recovery experiences among Hong Kong health care workers and teachers. *International Journal of Stress Management*, 21(1), 69–84.
- Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25, 518–524.
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26, 1059–1069.
- Smith, P., Kendall, L., & Hulin, C. (1969). *The measurement of satisfaction, in work and retirement: A strategy for the study of attitude*. Chicago: Rand McNally.
- Stoeberl, J., Childs, J. H., Hayward, J. A., & Feast, A. R. (2011). Passion and motivation for studying: Predicting academic engagement and burnout in university students. *Educational Psychology*, 31(4), 513–528.
- Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and Teacher Education*, 49, 78–88.
- Tennant, J. E., Demaray, M. K., Malecki, C. K., Terry, M. N., Clary, M., & Elzinga, N. (2015). Students' ratings of teacher support and academic and social-emotional well-being. *School Psychology Quarterly*, 30(4), 494–512.
- Terracciano, A., McCrae, R. R., & Costa, P. T. (2003). Factorial and construct validity of the Italian positive and negative affect schedule (PANAS). *European Journal of Psychological Assessment*, 19, 131–141.
- Trépanier, S. G., Fernet, C., Austin, S., Forest, J., & Vallerand, R. J. (2013). Linking job demands and resources to burnout and work engagement: Does passion underlie these differential relationships? *Motivation and Emotion*, 38, 353–366.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783–805.
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202–248.
- Vallerand, R. J. (2008). On the psychology of passion: In search of what makes people's lives most worth living. *Canadian Psychology*, 49(1), 1–13.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., et al. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756–767.
- Vallerand, R. J., Mageau, G. A., Elliot, A. J., Dumais, A., Demers, M. A., & Rousseau, F. L. (2008). Passion and performance attainment in sport. *Psychology of Sport & Exercise*, 9, 373–392.
- Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion in burnout: A process model. *Journal of Personality*, 78, 289–312.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of a brief measure of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Yildirim, K. (2015). Testing the main determinants of teachers' professional well-being by using a mixed method. *Teacher Development: An International Journal of Teachers' Professional Development*, 19, 59–78.