ABSTRACT

**Background:** Teachers' health has emerged as a crucial topic of the quality of the school system. In fact, high rates of attrition and burnout among teachers have emerged to cause their turn-over, sick leave and early retirement, as well as poor quality of the educational activities. The role of negative emotions and feelings experienced at work, in fact, has undoubtedly proven to have a strong impact on the general health of teachers. On the other hand, studies on well-being have proven to offer important opportunities to set up effective policies dealing with public health. More specifically, the role of dispositional, positive affect, such as happiness and self-esteem, has proven to be linked to individuals' health. Quite surprisingly, this link have not been addressed yet adequately among teachers. Moreover, observing the mediating role played by the teachers' working environment between dispositional traits and their health may help to develop effective measure for improving teachers’ well-being and the educational attainments of their students. In this respect it is interesting also to operate cross-country comparisons, in order to shed a light on the possible different, effects due to the different educational system and cultural environment. **Aims of the study:** To develop an exploratory study, aimed at investigating the mediating role played by job satisfaction between teachers’ happiness and self-esteem on the one hand and their physical and mental health on the other. To compare India and Italy, in order to highlight the possible differences between the two countries. **Methods:** A questionnaire was administered, containing questions about participants’ background information and the following scales: the Job Satisfaction Survey, the Rosenberg Self-
Esteem Scale, the Physical and Mental Health Scales (SF12), and the Ivens Scale in the Adapted Version for Teachers: School Children’s Happiness Inventory (SCHI). Participants were 300 primary and middle school teachers from the India and about 250 teachers from Italy. **Results:** Job satisfaction fully mediates between both happiness and self-esteem, and health teachers in both groups of teachers. Happiness and Self-esteem are linked positively to teachers’ health. **Conclusion:** Work is a relevant domain to promote teachers’ health, through job satisfaction.

**Keywords:** teachers’ health; teachers’ happiness; teachers’ self-esteem; teachers’ job satisfaction

**OBJECTIVES**

Teachers’ health has emerged as a crucial topic of the quality of the school system (OECD, 2014; Skaalvik & Skaalvik, 2011). Accordingly, when teachers show high rates of workplace stress and burnout, they are at higher risk for leaving job, retiring early and deliver poor quality in educational services. At the same time, the ways individuals experience their job roles, working environments and conditions have different influences on their health and well-being levels (Warr, 2007; Bakker & Demerouti, 2008; Halbesleben, 2010). Several authors have underlined the general tendency of psychological literature to consider teachers’ health from a negative point of view, namely considering factors that reduce the detrimental impact of risk factors (Peirò, Ayala, Tordera, Lorente & Rodriguez, 2014). Consistently, the study of the negative side of well-being clearly established that negative emotions, stress and burnout have detrimental consequences on teachers’ health (**). At the same time, studies on well-being have proven to offer important opportunities to set up effective policies dealing with public health (Ryan & Deci, 2001). More specifically, the role of positive affect, i.e. happiness, has proven to be linked to individuals’ health. This is consistent with Fredrickson’s Broaden and build theory, according to which positive emotions improve people subjective experience of well-being, by extending their cognitive and behavioral repertoire (broaden) and by supporting their psychological growth (build) (Cohn, Fredrickson, Brown, Mikels & Conway, 2009; Fredrickson, 1998; Fredrickson & Losada, 2005). Within the same framework, Fredrickson stated the protective effect of positive emotions towards physical health, demonstrating that when individuals are good at acknowledging positive emotions, their cardiovascular health is better protected (Fredrickson, 2000; Kok, Coffey, Cohn, Catalino, Vacharkulksemsuk, Algoe, & Fredrickson, 2013). Quite surprisingly, this link has not been addressed adequately among teachers yet. Despite this, several dimensions frequently studied in teachers may have a role in the association between happiness and health in these professionals. This is the case for job satisfaction and self-esteem: the first is defined as the psychological response to the value judgment of one’s job (Spector, 1997), the second as the affective response to one’s evaluation of self-worthiness (Coopersmith, 1959). While both the dimensions have been frequently studied in relationship with burnout prevention (e.g., Buonomo, Fatigante & Fiorilli, 2017; Friedman & Farber, 1992; Pascual, Perez-Jover, Mirambell, Ivanez & Terol, 2003; Brackett, Palomera, Mojsa Kaja, Reyes & Salovey, 2010), few studies have addressed their role in promoting physical health (e.g., Reitzes & Mutran, 2006). Despite this, studies grounded in the positive psychology approach have studied the connection between happiness, job satisfaction and self-esteem, showing that the two latest dimensions may have a role in reinforcing the effect of happiness on several psychological well-being outcomes (Lyubomirsky, Tkach & DiMatteo, 2006; Uchida, Norasakkunkit & Kitayama, 2004). Accordingly, it is likely that job satisfaction and self-esteem may strengthen the role of happiness in influencing teachers’ health. Thus, we aim to verify the mediational role of job satisfaction and self-esteem in the association between teachers’ happiness and teachers’ health. Furthermore, considered that previous research
studied these variables with a cross-cultural approach (Lu & Gilmour, 2004; Uchida & Kitayama, 2009; OECD, 2014), we aim to verify the mediational effect both on an Indian and an Italian sample of teachers.

PARTICIPANTS
Two convenient samples of full-time in-service teachers from Italy and India were recruited from metropolitan areas. Italian participants were 282 (93.6% female) and Indian teachers were 300 (92% female). An anonymous questionnaire was administered, following the principal's permission of the schools involved, ranging from primary to high school. Each participant signed informed consent, and subsequently took part in the study. The research was conducted following the APA's ethical principles and code of conduct (American Psychological Association, 2002).

METHODOLOGY
The Subjective Happiness Scale (SHS; Lyubomirsky and Lepper, 1999) is a 4-item scale aimed at assessing subjective happiness, using a 7-point Likert scale. The first two items ask people to rate how they are generally happy about their life (1 = not a very happy person, 7 = a very happy person) and how happy they are in comparison with their peers (1 = less happy, 7 = more happy); the last two items ask respondents to what extent the characterization of an happy and of an unhappy person describe themselves (1 = not at all, 7 = a great deal). Higher scores on this measure indicate greater subjective happiness.

The Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965) consists of 10 items and assesses self-esteem. All item were rated using a 4-point Likert scale, ranging from 1 = I strongly disagree, to 4 = I strongly agree. The higher the score, the higher the self-esteem. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

The Job Satisfaction Survey (JSS; Spector, 1985) is a 36-item scale aimed at assessing respondent's satisfaction about his/her job situation. It is composed by 9 sub-scales: pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication. Items were rated using a six-point Likert scale, ranging from: 1 = “I disagree very strongly” to 6 = “I agree very strongly.” Total job satisfaction is expressed as a total score ranging from 36 (low job satisfaction) to 216 (high job satisfaction).

Teacher Happiness was evaluated with the adapted version for Teachers of the School Children Happiness Inventory (Ivens, 2007). The adapted version consists of 33 items, measured on a 4-point Likert scale, ranging from 1 = I strongly disagree, to 4 = I strongly agree. The higher the score, the higher the happiness perceived at school. The adapted version, despite not validated yet, showed good reliability (Cronbach's alpha .93).

Physical and Mental Health Scales (SF12; Ware et al., 1996) is a short form survey composed by 12 questions, selected from the SF-36 Health Survey (Ware et al., 1996). Items are grouped into 4 sub-scales: one sub-scale using a 3-point Likert scale to assess limitations in physical activity and physical role functioning; two sub-scales using a 5-point Likert scale assessing, respectively, pain and overall health; a sub scale using 6-point Likert scale, assessing mental health, vitality, and social functioning. The scale contains also questions with yes/no answers, to assess limitations in role functioning as a result of physical and emotional health. The possible score ranges from 0 to 100, where higher scores represent better health.

DATA ANALYSIS
Data were analyzed using PASW Statistic version 24.0 (SPSS, Chicago). Preliminarily, associations between teachers’ happiness at work, teachers’ self-esteem and teachers’ health were analyzed.
by a multiple linear regression in the two samples. Mediation analyses were then performed in both samples, using the SPSS macro PROCESS, to verify the indirect effects of, respectively, teacher happiness at work and self-esteem on teacher health, through job satisfaction. Bootstrap confidence intervals were used, and all variables were mean centered before running the analysis, to minimize the risk of multicollinearity.

RESULTS

From the multiple linear regression on both Indian sample, \([R^2=.46; F_{2,297}=56.08, p<.001]\) and Italian sample \([R^2=.41; F_{2,277}=97.84, p<.001]\), teacher happiness at work (Indian: \(\beta = .359, p < .001\); Italian: \(\beta = .563, p < .001\)) and teacher self-esteem (Indian: \(\beta = .469, p < .001\); Italian: \(\beta = .149, p = .004\)) were significant predictors of schoolteachers' health.

Considering mediation analyses for the Indian sample, results showed that job satisfaction fully mediates the relation between happiness and health (Fig.1) \([\text{indirect effect } = 0.368, SE = 0.052, 95\% CI (0.2744, 0.4811)]\) and moreover, job satisfaction significantly mediated the relation between self-esteem and health (Fig.2) \([\text{indirect effect } = 0.247, SE = 0.039, 95\% CI (0.174, 0.332)]\).

[“Figure 1 - Indian sample, indirect effect of happiness at work on health through job satisfaction” here]
[“Figure 2 - Indian sample, indirect effect of self-esteem on health through job satisfaction” here]

Regarding mediation analyses for the Italian sample, job satisfaction did not mediate the relation between teacher happiness at work and teacher health (Fig.3) considering that the regression of job satisfaction on teacher health was not significant \((b=0.214, t(280)=1.402, p>.05)\). Despite this, the results of the second mediation model showed that job satisfaction significantly mediated the relation between teacher self-esteem and teacher health (Fig.4) \([\text{indirect effect } = 0.0574, SE = 0.0267, 95\% CI (0.0141, 0.1169)]\).

[“Figure 3 - Italian sample, indirect effect of happiness at work on health through job satisfaction” here]
[“Figure 4 - Italian sample, indirect effect of self-esteem on health through job satisfaction” here]

DISCUSSION

According to our findings, job satisfaction and self-esteem differently influence teachers’ health in Italy and in India. More specifically, despite both the dimensions predict teachers’ health, only self-esteem mediates the relationship between happiness and health in both the samples. Job satisfaction, indeed, mediates the effect of happiness on teachers’ health in Indian teachers only. Furthermore, the mediational effects in both samples are only partial, thus showing that happiness has a specific role in predicting health states in teachers, and that these effects are independent from cultural contexts.

Overall, our findings confirmed previous literature regarding the beneficial effect of happiness on health (Fredrickson, 2000; Kok, Coffey, Cohn, Catalino, Vacharkulksemsuk, Algoe, & Fredrickson, 2013).

Furthermore, we confirmed previous works about the role of self-esteem in predicting well-being, shedding new light on its role in mediating happiness’ effect on health, and expanding cur-
rent literature on teachers’ health conditions (Lyubomirsky, Tkach & DiMatteo, 2006; Uchida, Norasakkunkit & Kitayama, 2004). More specifically, it seems plausible that valuing oneself positively may help teachers recognizing and valuing the positive emotions related to their job, thus leading to feeling healthier (Reitzes & Mutran, 2006).

At the same time, we showed that job satisfaction has a differential effect on happiness, depending on the Western vs. Non-Western culture of teachers. More specifically, Italian teachers do not benefit from the mediational effect of job satisfaction in the relationship between happiness and health. Despite, to the best of our knowledge, research lacks from information about representative samples of Indian teacher, OECD surveys inform that Italian teachers suffer from low job satisfaction. It is likely that this condition may have influenced results in the Italian sample. Furthermore, previous studies in the Italian school context have shown that Italian teachers believe that the positive emotions felt at work are related to the teacher-student relationship, but not to the organizational context (Buonomo, 2017). Job satisfaction, indeed, is more related to the organizational dimensions of job evaluation (roles, general environment, promotions, supervisions, benefits, etc.; Spector, 1985). Thus, it is likely that, for Italian teachers, happiness at work directly influence their health, as they generally don’t associate positive emotions to their work environment (Buonomo, 2017).

Despite promising, our results don’t consider representative samples of Indian and Italian teachers. For this reason, it would be interesting to further expand the size of our samples, to better understand the differences between the two countries. By doing so, we would verify again the mediational effect of job satisfaction, on a bigger, representative sample of Italian teachers. Furthermore, adopting a longitudinal design would allow us to define causal effects among the studied variables. Finally, it would be interesting to add information about how the participants perceive their organizational environment.

CONCLUSIONS

Self-esteem and job satisfaction seem to have a beneficial effect, and to mediate the positive effect of happiness, on health. At the same time, job satisfaction does not show a mediational effect in the Italian samples. Further research is needed to understand the relationships among happiness, health, job satisfaction and self-esteem within and among the two countries.

REFERENCES


