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## Teaching happiness at school: Non-randomised controlled mixed-methods feasibility study on the effectiveness of Personal Well-Being Lessons

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The paper presents an educational initiative to develop a separate well-being curriculum for a federation of schools in south-east London. A mixed-methods study was undertaken to evaluate the feasibility of the curriculum run biweekly in Year 7 (age 11–12,  $N = 96$ ). The study utilised a non-randomised repeated measures design with a control group ( $N = 68$ ) using general life satisfaction, domain life satisfaction and affect balance as outcome variables. In addition, semi-structured interviews were conducted with four students, two teachers and the principal of the intervention school. The results indicated significant buffering effect of the intervention in protecting students against the decline of satisfaction with self, satisfaction with friends, positive affect and the increase in negative affect throughout the first year of middle school. The qualitative data shed light on explicit learning, psychological outcomes and challenges associated with the programme. Overall, the data indicate a positive impact of the well-being curriculum.

**Keywords:** positive education interventions; adolescent well-being; student life satisfaction; middle school

### Introduction

As early as 1947, the World Health Organization defined health in terms of wellness, including physical, mental and social well-being, not merely the absence of disease (WHO, 1948/2006). A comprehensive and systematic review of the research literature between 1930 and 2008 reveals a gradual shift in both research and school practices away from the concept of general student welfare, with an emphasis on individual assistance and support, and towards the concept of student psychological well-being, with an emphasis on universal, rather than targeted interventions and the development of positive behaviours (Noble, McGrath, Roffey, & Rowling, 2008). This shift may be partly fuelled by the growing awareness that emotions are intimately bound up with cognition and learning, coupled with concern at growing rates of depression among young people (Craig, 2007). Undoubtedly, the emergence of the new field of positive psychology in 1998 (Seligman, 1998) has helped to provide a growing body of evidence about what contributes to well-being and why it is important. It has argued that whilst the human tendency to focus on the negative aspects of our experience has had evolutionary survival value, directing excessive attention towards such experiences compromises our happiness and impedes our ability to learn. Evidence emerging from the field documents the advantages brought about by well-being and happiness.

For example, work on the effects of positive emotion on learning, creativity and memory (Fredrickson, 2001; Isen, 2001) suggests that happy students are likely to learn more effectively. Research demonstrates that happy people are successful across multiple life domains, including marriage, relationships, health, longevity, income and work performance (Chida & Steptoe, 2008; Diener & Chan, 2011; Harter, Schmidt, Asplund, Killham, & Agrawal, 2010). They are more creative, able to multitask and endure boring tasks, and more trusting, helpful and sociable (Lyubomirsky, King, & Diener, 2005). Happy individuals are more likely to help others and their societies by giving more money to worthy causes, donating more volunteer time to charities and donating more blood to blood banks. They are also more sympathetic to those in need, and are more likely to see those from other groups in a positive light (Priller & Schupp, 2011; see De Neve, Diener, Tay, & Xuereb, 2013 for a review).

Ricard (2003) posits that happiness, in the sense of a deep, lasting well-being, is a skill that can be learned with committed effort. Thus, cultivating classroom practices and curricula designed to promote happiness and well-being, in addition to, and not instead of, traditional educational curricula subjects, may lead to ripping the benefits brought about by subjective well-being. Many schools are already engaged in this work to some degree. Approaches such as Social and Emotional Learning

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(SEL; Elias et al., 1997) and Social and Emotional Aspects of Learning (SEAL; Department for Education and Skills, 2005), potentially considered as the older siblings of well-being curricula, have been shown effective across many outcomes, including school climate, students' autonomy and influence, learning and attainment, and reduction of exclusion (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Lendrum, Humphrey, Kalambouka, & Wigelsworth, 2009; Wigelsworth, Humphrey, Kalambouka, & Lendrum, 2010). Although not explicitly articulated, several components of well-being education were integrated into the SEL and SEAL programmes (e.g. creating a committed and supportive environment, focusing on one's emotions, working to realise one's full potential, finding meaning in one's experience). Many other discrete programmes promoting resilience and social skills and decreasing stress and anxiety have been validated in recent years (Brunwasser, Gillham, & Kim, 2009; Kam, Greenberg, & Walls, 2003; McGrath & Noble, 2003; Patton, Bond, Butler, & Glover, 2003). Again, many of these programmes included some aspects of emotional well-being, though none address the issues of happiness in adolescence more directly.

The evidence for more focused well-being/happiness curricula is still extremely limited. Whilst two leading independent private schools in the UK and Australia (Wellington and Geelong Grammar) attracted a lot of media attention over their introduction of 'happiness lessons', these encouraging attempts have unfortunately not been evaluated scientifically (Seldon & Morris, 2007; Seligman, Ernst, Gillham, & Reivich, 2009). Although many individual positive psychology interventions have been extensively evaluated, to date, there are few controlled studies looking at the effectiveness of composite well-being interventions in school settings. A 17-lesson long Positive Psychology Programme at Strath Haven High School was shown to increase children's social skills and engagement in school (Seligman et al., 2009). A six-week controlled psychological well-being intervention in Italy has resulted in improving personal growth and decreasing distress in one of the studies (Ruini et al., 2009), but failed to produce any outcomes on well-being in another (Tomba et al., 2010). A one-year-long health promotion programme in Sweden resulted in maintaining the previous levels of well-being in the intervention, in comparison to the control group (Haraldsson et al., 2008), whilst a 10-week wellness promotion intervention resulted in slight increase in the life satisfaction of children in the intervention group, albeit in the absence of interaction effects (Suldo, Savage, & Mercer, 2014). Shoshani and Steinmetz (2014) report on a one-year-long positive psychology Maytiv School Programme, in which 537 adolescents showed significant decreases in general distress, anxiety and depression symptoms and increases

in optimism, self-esteem and self-efficacy, though not life satisfaction, in comparison with 501 students in a demographically similar control school. Finally, Kuyken et al. (2013) have demonstrated positive effects of a nine-lesson mindfulness programme on well-being in a non-randomised controlled study.

The aim of the current investigation was to test the efficacy of a new school programme for the promotion of happiness and well-being skills in adolescence according to the subjective well-being perspective. Subjective well-being, sometimes referred to as a scientific operational definition for happiness, includes both a cognitive and an affective self-evaluation of one's life and experiences (Diener, Lucas, Schimmack, & Helliwell, 2009). A person with high subjective well-being experiences frequent positive emotion, infrequent negative emotion and an overall judgement of high satisfaction with his or her life on the whole. Given that the majority of the existing evaluation studies of well-being promoting programmes focused mainly on the effects interventions had on depression symptoms, and were less conclusive regarding well-being variables, there exists much scope for further investigation of the sometimes complex patterns of intervention outcomes. Besides comparing quantitative data between treatment and control cohorts, qualitative methods (i.e. interviews with randomly selected students and teachers) were applied in the current study in order to collect important additional information regarding the implementation of the intervention.

## Quantitative study

### Methods

#### *Design and participants*

The study was a non-randomised control group design with a pre-test and post-test. It was decided to use existing student groups, in order to minimise the disruption introduced by the research into the study setting.

Seventh-grade students from two south-east London schools comprised the intervention and control group. Both schools belonged to the Haberdashers' Aske's Federation of Schools and were matched on socio-economic status. The intervention consisted in a series of 18 bi-weekly Personal Well-Being Lessons (50 min each) administered by four teachers to eight groups of 25–30 students at one school throughout the school year. At the other school used as control, three groups of 25–30 students received the same number of personal, social and health education lessons (which is a more general health education curriculum not focused specifically on psychological aspects, such as well-being).

The sample ( $N = 164$ ) included 96 students in the intervention group (47 boys and 49 girls) and 68 students in the control group (35 boys and 33 girls). The initial sample included 211 students in the intervention

group, 8 of whom were absent at pre-test, 32 were absent at post-test and 13 were absent at both measurement occasions. Sixty-two more students who completed the pre-test failed to sign their forms at post-test due to teacher negligence, and their scores could not be matched for the two measurement occasions; however, their mean scores did not differ significantly from those of the 96 students included in the sample. The control group initially included 85 students, 2 of whom were absent at pre-test, 3 were absent at post-test and 6 were absent at both occasions. Additionally, six students who completed the pre-test did not sign their forms properly at post-test.

#### *Personal Well-Being Lesson curriculum*

The Personal Well-Being Lesson curriculum is a set of 18 scripted lessons tailored to secondary schools, supported by extensive teacher and student materials and dedicated teacher training. These 18 lessons cover the scientific bases of happiness, focusing specifically on two core aspects – positive emotions/experiences and positive relationships. Every lesson is built on evidence-based psychological findings and is carefully scripted to include Lesson Plans (one page) and the Main Body (three–five pages). Each lesson introduces the concepts and skills through role-plays and other hands-on activities (three–five per lesson) that students are encouraged to practise throughout the lesson. Notes on the side are designed to inform teachers of psychological theory and empirical findings behind suggested activities and interventions. References and further readings are provided at the end of each lesson. Each lesson includes carefully designed resources, such as PowerPoint presentations and students handouts, bound together in student well-being diaries.

The curriculum has been developed iteratively over two years with extensive teacher involvement from participating schools. It was based on theoretical constructs from well-being research and included positive psychology interventions whose efficacy was already well established (three good things, forgiveness letter, gratitude visit, etc.). It was designed in line with principles identified as important for successful implementation of social and emotional competences and well-being-related programmes, including whole-school approach; teaching by class teachers; acceptance by teachers; positioning it as a universal intervention for all students, rather than those at risk in the long-term perspective; incorporating several skills derived from cognitive behaviour approaches; and evidence-based teaching strategies, such as co-operative learning, educational games tournaments and circle time-type approaches (Noble & McGrath, 2013). The resulting 18 lessons were as follows. Table 1 provides a brief overview of each of the lessons, as well as the correspondences to the detailed descriptions (full lessons,

PowerPoint presentations and lesson handouts) provided in Boniwell and Ryan (2012).

In order to ensure that teachers had a high degree of understanding of the programme and could deliver it in a reliable manner, they underwent an intensive five days of training prior to the beginning of the school year, leaving them the summer for further readings and reflections in order to better integrate these practices into their subsequent teaching. The first two days were exclusively focused on ‘adult well-being skills’ followed by three days focused on how to teach these skills to students. The whole-school approach was ensured by extensive discussions with the Federation’s management team, presentations to all staff during one of the teacher training days, optional workshops to teachers and optional presentations advertised to all Year-7 parents.

#### *Measures*

Because none of the well-being measures used have alternative equivalent forms, the same set of measures was utilised for pre-test and post-test. The presence of a control group and a significant time interval between the two measurement sessions would eliminate the potential bias associated with repeated testing.

*Students’ Life Satisfaction Scale* (SLSS) (Huebner, 1991) is intended for children aged 8–14. It includes seven items rated on a 6-point Likert scale measuring general life satisfaction. Sample items: ‘My life is going well’, ‘I wish I had a different kind of life’ (reverse-scored). The reliability of this scale was 0.84 (Cronbach’s  $\alpha$  reliability values for the pre-test are given,  $N = 164$ ).

*Multidimensional Students’ Life Satisfaction Scale* (MSLSS) (Huebner, 1994; Huebner & Gilman, 2002) is a self-report instrument designed for use with students in grades 3–12. It includes 40 items rated on a 4-point scale measuring satisfaction with different aspects of life: self (0.80), school (0.80), living environment (0.78), friends (0.90) and family (0.83).

*Positive and Negative Affect Schedule for Children* (Laurent et al., 1999) includes a list of 27 adjectives that reflect positive affect (PA: 12 items) and negative affect (NA: 15 items). The respondents rate the extent to which they experienced each emotion during the past few weeks on a 5-point Likert scale. The reliabilities for the PA and NA scales were 0.90 and 0.89, respectively.

Regression imputation was used when responses to one or two items per scale were missing. IBM SPSS Statistics 20 software package was used to analyse the quantitative data.

#### *Procedure*

Pre-test was administered in the beginning of September and post-test was administered at the end of June. The

Table 1. The outline of Personal Well-Being Lessons curriculum.

Lesson	Outline of teaching activities and interventions	Correspondence to Boniwell and Ryan (2012)
1. Building the Basics	Reflecting on happiness Working with happiness quotes Scientific conceptions of happiness Questionnaire completion Findings on the importance of happiness	Lesson 1
2. Just for Fun	Sharing a funny story and discussion of the purpose of humour Introduction to the theories of humour Humour projects (portrait, TV advert, extraordinary lies) Brief laughter session	Lesson 16
3. Understanding Emotions	Understanding and labelling emotions The emotional thermometer activity The Hoyt video and emotional range Find the ratio activity	Lesson 13
4. Positive Emotions	Labelling and importance of positive emotions Interventions for enhancing positive emotions (ACT – active, calming, thinking) Experimenting with interventions (e.g. physical activity, breathing, reframing)	Lesson 15
5. Reducing Negative Feelings	Understanding the negativity bias Exploring one's negative triggers The 'sticky path' activity (negative spiral) Noticing emotions activity	Lesson 14
6. Hope	Sentence completion activity 'I hope...' The importance of hope 'Finding the way' activity 'Finding the will' activity 'Hope talk' reframing activity	Lesson 20
7. Building on the Positives Part 1	Understanding savouring Savouring questionnaire completion Savouring activity	Lesson 17
8. Building on the Positives Part 2	Creating a 'savouring menu' Understanding positive reminiscence and associated strategies 'Positive mental time travel' activity 'Sharing an experience' activity 'Visual reminiscence' activity	Lesson 18
9. The Flow Zone	Understanding flow Flow zone matrix activity The paperclip exercise	Lesson 27
10. Happiness Across Cultures	Introduction 'How happy is your country?' activity Happiness debate Happiness in Britain today A 'happiness manifesto'	Lesson 36
11. The Happiness Equation	Understanding happiness (Lyubomirsky equation) 'Happiness is related to' activity Poster creation activity	N/A
12. Positive Relationships	The importance of healthy relationships 'Tonic versus toxic' activity Conflict resolution strategies 'Bumpy road' activity	Lesson 31
13. Everyone is Different	Introduction to strengths The strengths cards activity in small groups 'My strengths portfolio' activity 'Strengths feedback' activity Using strengths in a different way	Lesson 3
14. Strengths Stories	The strengths stories and songbook Creating the songbook (decorating the CD, gathering the contents, songbook credits)	Lesson 6

(Continued)

Table 1. (Continued).

Lesson	Outline of teaching activities and interventions	Correspondence to Boniwell and Ryan (2012)
15. Listening to Others	Exploring listening and empathy 'Can you hear me?' paired activity	Lesson 33
16. Forgiveness	Active-constructive responding Understanding the importance of forgiveness Practising letting go of grudges The 'forgiveness letter' activity	Lesson 32
17. Kindness and Gratitude	'Wishing others well' activity Understanding kindness and gratitude 'Three good things' activity	Lesson 35
18. Putting it Together	'Thank you letter' activity 'Key facts' recall 'The how of happiness' – a visual summary of learning (mind map, leaflet, poster or PowerPoint presentation) 'Thank you' activity	N/A

questionnaires were administered as a battery and instructions were read aloud. Parental consent was obtained prior to the study. The study was approved by the Research Ethics Committee of the University of East London (UEL).

**Results**

The descriptive statistics for the study variables and effect sizes (Cohen's *d*) of the pre-test vs. post-test differences are presented in Table 2. The scale scores are shown as item means to facilitate interpretation.

In order to explore the effect of the intervention, first, a 2 × 2 mixed ANOVA was performed, with time, school (intervention vs. control) and student gender as factors predicting each of the well-being variables in turn (gender was used as a control variable). Whenever

significant interaction effects were found, we followed by a 2 × 2 ANOVA to test main effects of time and gender for each group, as well as gender and group for each time point.

Although the Levene statistic was significant for some variables, the sample sizes of the subgroups did not differ much, and the ratio of the largest cell variable to the smallest did not exceed 5, which allowed the data to be considered acceptable for ANOVA (Tabachnik & Fidell, 2007). Partial  $\eta^2$  coefficients were used to compare the sizes of different effects. The results of ANOVA analyses are summarised in Table 3.

**Life satisfaction**

No significant main or interaction effects were found for the general Students' LSS, as well as for the total score

Table 2. Descriptive statistics for the study variables and effect sizes for the difference between pre-test and post-test in the intervention group (*N* = 96) and the control group (*N* = 68).

	Pre-test				Post-test				Group difference		Pre- vs. post-test difference	
	Intervention <i>M</i>	Control <i>M</i>	Intervention <i>M</i>	Control <i>M</i>	Intervention <i>M</i>	Control <i>M</i>	Intervention <i>M</i>	Control <i>M</i>	Pre-test <i>d</i>	Post-test <i>d</i>	Intervention <i>d</i>	Control <i>d</i>
SLSS	4.64	4.83	4.73	4.74	0.17	0.01	0.11	-0.10				
MSLSS-Self	4.81	5.30	4.79	4.94	0.69***	0.17	-0.03	-0.61***				
MSLSS-Family	5.03	5.30	4.71	4.92	0.39*	0.30	-0.37***	-0.53**				
MSLSS-School	4.59	4.61	3.99	4.35	0.01	0.40*	-0.64***	-0.31*				
MSLSS-Friends	5.23	5.46	5.19	5.06	0.34*	-0.17	-0.05	-0.57***				
MSLSS-Living Environment	4.80	4.51	4.66	4.38	-0.15	-0.31	-0.17	-0.14				
Positive affect	3.85	4.11	3.65	3.48	0.32	-0.22	-0.24*	-0.79***				
Negative affect	1.58	1.50	1.50	1.82	-0.15	0.54**	-0.16	0.55**				

Note: *M* – mean, *SD* – standard deviation, *d* – Cohen's *d*; Student *t* test. \*\*\* *p* < 0.001; \*\**p* < 0.01; \**p* < 0.05.

Table 3. Results of the  $2 \times 2 \times 2$  mixed ANOVA.

		Main effects			Interaction effects			
		Time	School	Gender	Time *School	Time *Gender	Time *School *Gender	School *Gender
SLSS	$F$	0.081	0.447	1.559	1.249	0.044	0.245	0.036
	$\eta^2_p$	0.001	0.003	0.010	0.008	0.000	0.002	0.000
MSLSS-Self	$F$	12.626	11.088	1.651	10.231	0.395	0.031	0.035
	$\eta^2_p$	0.076**	0.067**	0.011	0.062**	0.003	0.000	0.000
MSLSS-Family	$F$	23.046	5.637	0.114	0.001	0.252	0.000	1.327
	$\eta^2_p$	0.132***	0.036*	0.001	0.000	0.002	0.000	0.009
MSLSS-School	$F$	37.475	2.061	0.041	5.406	6.083	0.512	0.102
	$\eta^2_p$	0.200***	0.014	0.000	0.035*	0.039*	0.003	0.001
MSLSS-Friends	$F$	12.115	0.279	6.361	8.159	4.381	0.007	0.990
	$\eta^2_p$	0.075**	0.002	0.041*	0.052**	0.028*	0.000	0.007
MSLSS-Living Environment	$F$	3.244	4.741	0.001	0.005	0.008	0.075	0.851
	$\eta^2_p$	0.022	0.032*	0.000	0.000	0.000	0.001	0.006
Positive Affect	$F$	36.372	.190	4.937	9.457	2.553	0.077	0.601
	$\eta^2_p$	0.211***	0.001	0.035*	0.065**	0.018	0.001	0.004
Negative Affect	$F$	4.440	2.903	0.905	13.065	1.098	0.319	2.197
	$\eta^2_p$	0.032*	0.021	0.007	0.088***	0.008	0.002	0.016

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

of the MSLSS. However, a number of effects related to domains of life satisfaction measured by the MSLSS were statistically significant.

Significant interaction effect between the group and time factors was found for the Satisfaction with Self scale. The simple effect tests indicated a significant difference between the two groups at pre-test ( $F(1,157) = 18.50$ ,  $p < 0.001$ ,  $\eta^2_{\text{partial}} = 0.105$ ), but not at post-test ( $F(1,157) = 1.31$ ,  $p = 0.25$ ,  $\eta^2_{\text{partial}} = 0.008$ ). The scores exhibited a significant drop from pre-test to post-test in the control group ( $F(1,64) = 22.20$ ,  $p < 0.001$ ,  $\eta^2_{\text{partial}} = 0.258$ ), but not in the intervention group ( $F(1,90) = 0.07$ ,  $p = 0.79$ ,  $\eta^2_{\text{partial}} = 0.001$ ).

There were no significant interaction effects for the Satisfaction with Family scale, with simple effect tests indicating a significant decrease in scores from pre-test to post-test both in the intervention group ( $F(1,88) = 17.34$ ,  $p < 0.001$ ,  $\eta^2_{\text{partial}} = 0.165$ ) and in the control group ( $F(1,64) = 7.69$ ,  $p < 0.01$ ,  $\eta^2_{\text{partial}} = 0.107$ ).

An interaction effect between the group and time factors was found for the Satisfaction with School scale. The scores were lower at post-test, compared to the pre-test, both in the intervention group ( $F(1,85) = 52.23$ ,  $p < 0.001$ ,  $\eta^2_{\text{partial}} = .381$ ) and in the control

group ( $F(1,65) = 4.98$ ,  $p < 0.05$ ,  $\eta^2_{\text{partial}} = 0.071$ ). The schools did not differ significantly at pre-test ( $F(1,157) = 0.01$ ,  $p = 0.93$ ,  $\eta^2_{\text{partial}} < 0.001$ ), but did at post-test ( $F(1,153) = 5.91$ ,  $p < 0.05$ ,  $\eta^2_{\text{partial}} = 0.037$ ), even though the effect size was small. This pattern indicates that the decrease in scores in the intervention group was stronger, compared to the control group. The significant interaction effect between time and gender indicated that the decrease in scores was more pronounced for girls than for boys.

The Satisfaction with Friends scale also exhibited a significant interaction effect between the group and time factors. The simple effect tests indicated higher scores in the control group, compared to the intervention group, at pre-test ( $F(1,157) = 4.50$ ,  $p < 0.05$ ,  $\eta^2_{\text{partial}} = 0.028$ ) with a small effect size, but not at post-test ( $F(1,153) = 0.92$ ,  $p = 0.33$ ,  $\eta^2_{\text{partial}} = 0.006$ ). The decrease in scores was significant in the control group ( $F(1,65) = 15.93$ ,  $p < 0.001$ ,  $\eta^2_{\text{partial}} = 0.197$ ), but not in the intervention group ( $F(1,85) = 0.25$ ,  $p = 0.62$ ,  $\eta^2_{\text{partial}} = 0.003$ ). The interaction effect of time and gender indicates that the well-being decrease was more pronounced for boys, compared to girls.

No interaction effects were found for the Satisfaction with Living Environment, the only weak main effect

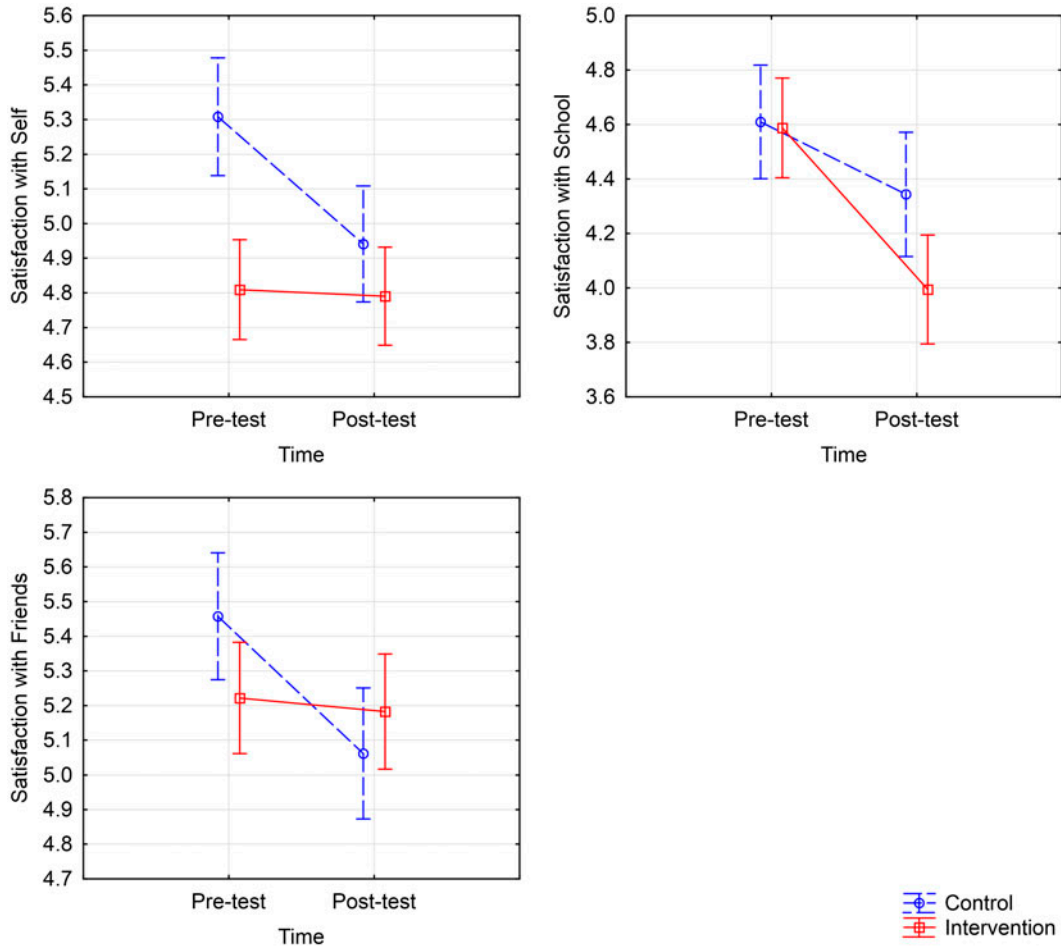


Figure 1. Estimated marginal means with 95% confidence intervals for MSLSS scores.

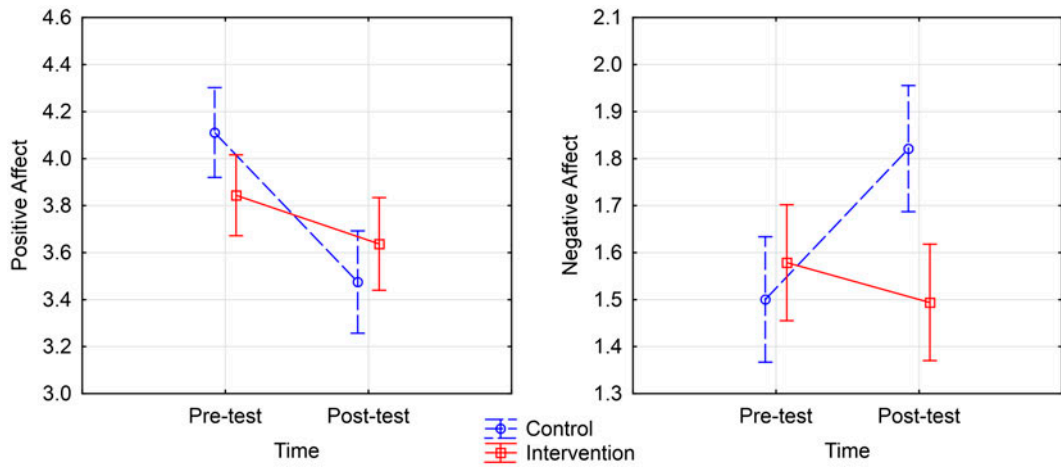


Figure 2. Estimated marginal means with 95% confidence intervals for PANAS-C scores.



indicating marginally higher scores in the intervention group.

The estimated marginal means for the satisfaction scales where significant interaction effects between school and time were found are presented on Figure 1.

### *Affect measures*

Both affect scales demonstrated significant interaction effects. The decrease in positive affect was stronger in the control group ( $F(1,61) = 28.93, p < 0.001, \eta^2_{\text{partial}} = 0.322$ ), compared to the intervention group ( $F(1,75) = 6.44, p < 0.05, \eta^2_{\text{partial}} = 0.079$ ). The difference in positive affect scores between the two groups was not statistically significant either at pre-test ( $F(1,144) = 3.69, p = 0.057, \eta^2_{\text{partial}} = 0.025$ ) or at post-test ( $F(1,145) = 1.44, p = 0.23, \eta^2_{\text{partial}} = 0.010$ ).

Negative affect scores did not differ between the groups at pre-test ( $F(1,145) = 0.89, p = 0.35, \eta^2_{\text{partial}} = 0.006$ ), but were significantly higher in the control group at post-test ( $F(1,144) = 11.12, p < 0.01, \eta^2_{\text{partial}} = 0.072$ ). The increase in negative affect from pre-test to post-test was significant in the control group ( $F(1,62) = 10.97, p < 0.01, \eta^2_{\text{partial}} = 0.150$ ), but not in the intervention group ( $F(1,73) = 1.83, p = 0.18, \eta^2_{\text{partial}} = 0.024$ ).

The estimated marginal means for the two affect scales are presented on Figure 2.

## **Qualitative study**

### *Methods*

#### *Design and participants*

Qualitative research is a unique method of data collection and analysis that enables researchers to understand the experience (not cause and effect) of an evaluation. This type of research offers interpretation of text and narratives (rather than testing predictions about variables). Furthermore, qualitative research looks for participant-defined meanings, not researcher-imposed ones. There is an explicit acknowledgement of human messiness and complexity, valuing contextual influences on the data, rather than trying to reduce them.

We employed a multiperspective evaluation approach (Robson, 2002), supplementing the quantitative research with qualitative data to complement and enhance the quantitative findings by drawing on the subjective experiences of participants (Greene, Caracelli, & Graham, 1989). There is a strong case for multiperspective evaluation studies due to the risk of poor-quality data collected via one single collection technique and biases in narration. The qualitative study gathered data from different sources, including four students (two girls and two boys randomly selected by a researcher who did not know the children; one student was chosen from the intervention classes

taught by each of the four teachers involved), two teachers (randomly selected out of the four teachers involved in the intervention) and the principal of both schools participating in the study. The combined sample comprised seven participants, which was deemed sufficient, as the aim of the research was to combine data ('collective case study' – Onwuegbuzie & Leech, 2007), rather than compare different cases.

We used one-to-one, in-depth semi-structured interviews to collect data from each participant (focus group approach was originally envisaged, but turned out impractical due to the heavily charged timetable at the end of the school year).

### *Procedure*

Following the year-long intervention, we asked four students, two teachers from the intervention school and the principal to participate in an interview about their thoughts and experiences of the Personal Well-Being Lessons 'as part of a research dissertation'. Each of the interviews with adults lasted approximately an hour and each of those with children was approximately 40 min long.

Parental consent was obtained for the student participants. All participants were briefed on the nature of the one-to-one interviews by the researcher and reminded of their rights as research participants and the confidentiality of all the information they would provide. Following the interview, the participants were offered the choice for further briefing and opportunities to ask additional questions related to the study or the programme.

The interviews were recorded using an Olympus mp3 player and subsequently transcribed by the researchers. Only the research team had access to the data; names and any other identifying information were removed from the transcripts. Ethics was approved by the UEL Graduate School Ethics Committee.

Three separate interview schedules were developed for the semi-structured interviews of children, teachers and the principal, consisting of between eight and twelve questions each. These included open-ended questions, such as 'How did you find learning about well-being?', 'What did you like most about it?', 'What did you like least about it?', 'Have you used anything from the well-being lessons outside of school?' (students), 'What was your experience of teaching the programme to students?', 'Can you identify some of the best moments of the delivery? What made them special?', 'Some concepts appear to be quite difficult to get across, is this something you can relate to? If so, can you expand on this?' (teachers), 'Developing staff for delivery has been a necessary process, can you tell me how this was done and what responses the staff have emerged with over

time?’ and ‘How do you feel the children have responded to the programme?’ (principal).

### Analysis

Researchers employed the use of inductive thematic analysis (Braun & Clarke, 2006) to evaluate the multi-perspective data-set. Thematic analysis is the analysis of textual material that looks for major themes, beyond surface-level description. Traditionally, thematic analysis is used to analyse in-depth interviews and focus groups, as used in this study.

After transcription, the researchers read through and became familiar with the text. Once the transcripts were read and analysed by the third researcher for preliminary themes individually and across the groups, the lead researcher conducted a detailed, line-by-line analysis before moving on to highlight broader overarching themes. The lead researcher used this more in-depth approach to compile a higher level of abstraction, resulting in the final list of themes on the experience of the Personal Well-Being Lessons. Ultimately, this method is about quality, not quantity, thus a smaller number of themes demonstrated refinement and engagement with the text.

### Results

The results demonstrated three main themes and several sub-themes regarding the participants’ experiences of Personal Well-Being Lessons (Figure 3). These included: *Explicit Learning* (strategies, subject learning, uniqueness), *Psychological Outcomes* (self-awareness, awareness of others, personal transformation, intrinsic interest) and *Challenges* (internal challenges, external challenges).

The quotes have been presented non-verbatim for clarity and flow. Words such as ‘um, ah, erm’, etc., as well as stutters, have been removed.

### Explicit learning

The theme of explicit learning captures the actual concepts and discoveries related to the specific *subject knowledge* mentioned by students:

We’ve done something called the flow zone and basically it’s split into three sections. One is things you find easy, one are things that are too hard, and then the one that you enjoy most. And I enjoyed that because I get to.. like... what do you call it. You get to see different things and then you see why you like that particular one ... (Boy 1)

Children not only learned new concepts and ideas (like savouring, for example), but they also experimented with exercises and activities, grounding these concepts in real-life experiences, sometimes with surprising results:

We were doing savouring, I am sure you know, when you look at the bit of food and smell it, touch it, you put it in your mouth, but you don’t bite, you put it on your tongue...They laughed ‘Yes, hey miss, strawberries have got hair’. This is brilliant, noticing things that we haven’t noticed before. (Teacher 1)

Specifically, both children and students frequently mentioned some *strategies* (such as mindfulness and meditation, for example) they learnt during the lessons then put into practise in their everyday life: ‘They teach you methods of happiness and I use that on the outside and it makes me feel much better’ (Boy 1).

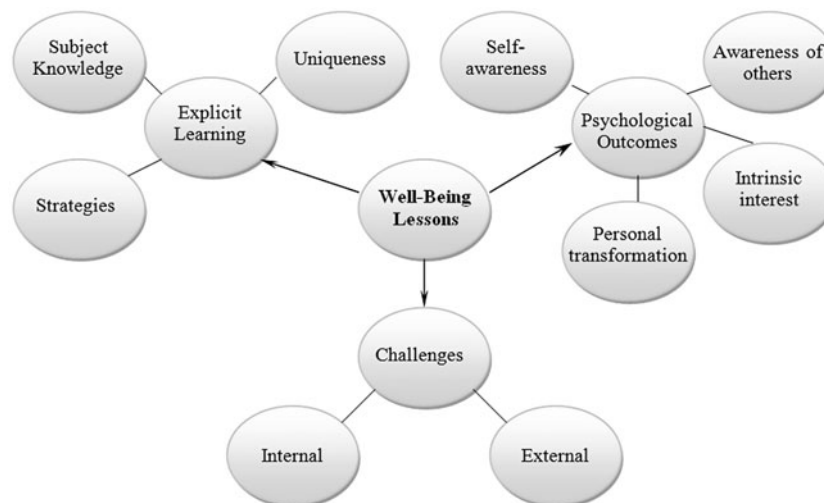


Figure 3. Themes and subthemes emerging from participants’ experience of Personal Well-Being Lessons.

What was even more interesting was an example given by one teacher of the strategies being used not only by the students (which was to be expected), but also by their parents:

The other one was the rubber band when the girl came in and she's tried the rubber band and she made all her family do it, not just her, for the day. It made them realise how horrible they are being to each other and how they were always moaning at each other, slugging each other off, but it made them stop and consider. (Teacher 2)

A rubber band exercise was used to help children notice their negative emotions, being instructed to click it every time they feel a negative emotion. This was done in order to increase their awareness and thus enable them to implement emotional management strategies appropriately.

What also came across quite strongly was the *uniqueness* of the subject matter, which was a source of pride, although as we would see in the third theme, also a challenge:

You can talk about things and stuff that none of the lessons like history and English don't cover, so you can think about feelings and how to deal with it, and if you are sad sometimes and you want to know how to cool down or not to get angry. I think it's quite good as well, because only a few schools in the country do this and we are one of them, so it's quite good. (Boy 2)

### **Psychological outcomes**

In addition to more obvious, subject-related outcomes, one of the main themes that emerged in the interviews was an increase in *Self-awareness* and *Awareness of others* in both students and teachers:

Doing well-being sessions has taught me more about myself than I knew before. I didn't know anything about my emotions and didn't know how they affected my ability. (Girl 1)

I think for me what has been eye opening is the fact that some of these children find it very difficult to cope. (Teacher 1)

In fact, we can probably go as far as to say that at least in some cases, people's lives were positively affected as a result of the programme. Once again, this applies not only to children but also to teachers, who, by teaching the programme, seemed to have experienced some personal transformation.

It broadens your views on everything and sometimes ... it gives you different ways to think about things, so [...] it makes you, like, more may be not educated but enlightened a little bit. (Girl 2)

I went on the course this time last year and it has affected me, it made me think more about me as in how I am, what I am doing, how I am behaving when I wake up in the morning and how I can control my life, stuff like I am going to have a good day or I am going to have a bad day and I can decide that ... (Teacher 2)

It seems that many students have found the subject matter *intrinsically interesting* and enjoyable. This could have been expected, yet it was interesting to see it clearly mentioned by participants.

I do find it very interesting – studying it and how people's minds work. (Girl 1)

I felt that I was seeing a level of discussion going on in the classroom that I wasn't seeing via the standard PSHE route or religious studies or ... in any other part of the curriculum. (the Principal)

### **Challenges**

Despite several perceived benefits, the implementation of the programme was met with some resistance from both the teaching staff not involved in the project and some students. One of the teachers remarked:

...but I do feel there is a resistance amongst the staff about it because they think it's just loads of clap-trap and I can see why they may think that, but it's not until you have actually done it that... we are fighting against the academic thing that it's not real work, you are not writing stuff down, you are not being tested every week... and there is no nice little certificate that you can have at the end of five years, it's not cut and dry. (Teacher 2)

This argument revolves around the positioning of lessons, such as well-being, PSHE and SEAL as non-academic subjects, not assessed and thus not leading to tangible outcomes in a form of a qualification. Another frequent form of opposition to the programme touched on boundaries between the educative function of a school versus that of a family, locating matters within the latter domain. In both cases, however, the arguments refer to the purpose and scope of school as a societal institution, highlighting somewhat contradictory positions on the above:

One colleague of mine, who has children at school, she thinks that it's completely ridiculous and that she said this is exactly what I should be teaching them at home, so I can't understand why we should be teaching happiness, it just doesn't make sense and you come across that quite a lot in the staff classroom; it is a subject you just have to defend, which I do understand because it is a new thing and anything new is always looked upon negatively ... (Teacher 1)

However, some signs of resistance and/or misunderstanding also emerge from students' discourses, ranging from doubting whether all of the students take *it on board* (Girl 1) through to confusion with regard to the role of research findings being presented as part of lessons:

They just give us research and show us but they don't say you know if you do this it will make you feel happier. (Girl 1)

While it is hard to believe that some of the teachers would have omitted to mention that research helps us to understand what does or does not make people happier, there may, of course, be differences with regard to teachers' own understanding of and engagement with the teaching materials, also highlighted by the following statement:

Well, it depends who is the teacher of well-being. (Girl 2).

### General discussion

The strongest effects that emerged in the quantitative data reflect a deterioration of well-being indicators: satisfaction with self, satisfaction with family, satisfaction with school, satisfaction with friends, positive and negative affect indicators deteriorated in the control group, paralleled by decrease in satisfaction with family, school and positive affect in the intervention group. This overall picture can be explained by the effects of burnout and school transition. Burnout has recently been studied in the school context (e.g. Salmela-Aro, Kiuru, Pietikäinen, & Jokela, 2008) and has been shown to increase throughout the school year (Martin-Krumm, Oger, & Sarrazin, 2009). Taking into account that Year 7 is the first year of middle school, the drop in well-being we observed is in line with a large number of existing findings demonstrating the negative impact of transition to secondary school on student well-being and academic achievement (Barber & Olsen, 2004; Blyth, Simmons, & Bush, 1978; Fenouillet, 2013). For instance, data from a British longitudinal study (Doddington, Flutter, & Rudduck, 1999; Rudduck, Chaplain, & Wallace, 1996) indicate that challenges and social upheavals associated with the move to middle school lead to a lack of engagement, learning motivation and performance towards the end of Year 7. The challenge of transition that the adolescents have to face is not always acknowledged by parents who may continue to pressure their children to succeed at school, in view of the students' diminished performance. This may be the reason why the well-being decrease is more pronounced in the school and family domains and concerns both groups.

The between-group effects we discovered were largely consistent with the intervention effectiveness hypothesis. Students in the intervention group did not experience such a strong decrease in satisfaction with self, satisfaction with friends, positive affect and such an increase in negative affectivity as the control group students did. The three domains where the intervention effect was not found were satisfaction with family, living environment and satisfaction with school. The absence of effect in the family domain is not surprising, given the fact that the intervention did not specifically target family relationships. Similarly, the level of satisfaction with the living environment is more related to objective external conditions that the intervention was not supposed to have altered in any way. The paradoxical effect on satisfaction with school can be attributed to some background events specific to the school where the intervention took place. However, it is also possible that the students who have undergone the Personal Well-Being Lessons have developed different strategies of coping with the same new school challenges. For instance, the Personal Well-Being Lesson programme may have led to a reduction of internalising coping style, which is related to lower well-being in middle-schoolers (Findlay, Coplan, & Bowker, 2009). This interpretation is in line with the fact that internalising coping style is predicted by interpersonal vulnerability and low self-concept (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999), which the intervention was expected to improve. Thus, instead of seeing themselves as the principal cause of their school difficulties, the intervention group students might be more likely to attribute their difficulties to the challenges of the school environment, compared to the control group students. Even though such an externalising view may not be productive in all situations, it certainly is more realistic in the case of middle school students who have to cope with the transition challenges.

The absence of significant effect of the intervention on the general life satisfaction in middle-schoolers is consistent with some existing findings (Shoshani & Steinmetz, 2014), and we side with these authors in explaining this result by the abstractness and generality of the items tapping into overall life satisfaction, compared to those of other questionnaires which tap into more specific everyday emotions and behaviours and are potentially more sensitive to the specific effects of the programme. The SLSS did not exhibit the drop in well-being demonstrated by most other well-being indicators, which suggests that the criteria used by adolescents to make general evaluations of their lives may differ from the emotional reactions and domain-specific criteria operationalised by the two other scales used in this study.

Another potentially interesting issue is the effect of gender. The interaction effects that emerged in the study suggest that girls and boys react in different ways to the challenges of their new school environment. Girls tended to become less satisfied with school by the end of the year, but remained equally satisfied with their friends, whereas boys demonstrated an inverse picture. These results fit with some existing findings, suggesting that the challenge of the new social environment of secondary school has more influence on boys, whose satisfaction with their social abilities decreases during the transition year more strongly than that of girls (Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991). A British study has found that friendship becomes the most important domain of life satisfaction for boys in the middle school and that the drop in school satisfaction associated with transition from junior primary to middle school is more pronounced in girls (Marks, Shah, & Westfall, 2004). Compared to the other effects, these effects of gender were relatively weak, and a large sample is needed to study them in detail.

To summarise, the intervention had predicted effects on four out of the eight indicators we used and no effects or an adverse effect on the other four. This is in line with the results of other studies testing positive interventions at school (e.g. Suldo et al., 2014; Tomba et al., 2010). Overall, the findings support the hypothesis about the buffering effect of the Personal Well-Being Lesson programme on the detrimental consequences of burnout and transition to middle school for well-being. Introduction of the programme in the curriculum makes it possible to control, at least to a certain extent, the rapid decline in well-being of middle school children, with potential positive repercussions on their academic performance. Qualitative results provided additional support for the positive effects of the intervention on psychological outcomes, such as self-awareness and personal transformation.

Importantly, the qualitative study brought to light some challenges associated with the delivery and reception of the programme, often related to the question of whether teaching happiness can be considered a role of school. Such challenges have also been raised by modern philosophers of education (e.g. Suissa, 2008). We do not, however, see any contradiction between a concern for happiness and a concern for learning. We agree with Noddings' (2003) contention that 'happiness and education are, properly, intimately related: Happiness should be an aim of education and a good education should contribute significantly to personal and collective happiness' (p. 1). Nevertheless, much can be done at a policy level to ensure better acceptance of such interventions, namely a dedicated specialisation within the teacher training programmes preparing positive education specialists. Also, awarding some academic credits to

participating students may put such interventions on more equal footing with other subjects.

The present study has a number of limitations, of which the first is a lack of randomisation. It is theoretically possible that the observed effects may have been partially caused by changes in some school-specific factors that were not accounted for, and some bias may have been introduced by attrition. However, the results can be considered as preliminary findings suggesting that the Personal Well-Being Lessons curriculum is efficient in maintaining a positive affect balance and higher satisfaction with self and with friends in middle-schoolers throughout the school year. Additional studies aimed at replicating these findings are currently being planned and implemented in the UK, Japan, and France. In addition to replicating this feasibility study in more extensive and diverse samples, it is important to investigate the effects of Personal Well-Being Lessons using a wider range of adjustment, academic performance and mental health indicators. Furthermore, the qualitative evaluation may benefit from focus group data collection methodologies.

The programme itself could be improved further, as it only addresses a few of the topics shown by research to be important for well-being and happiness. New lessons could be developed focusing on different themes (such as meaning, personal autonomy, eudaimonia vs. hedonia, among others), tailored to different age groups, and additional theoretical and empirical work is needed to find out which themes work best in each age group. Thus, we do not see the present version of the well-being curriculum as an end result, but as a showcase demonstrating that students can and do benefit psychologically from learning 'happiness skills' at school. This study contributes to the growing body of research evidence necessary to make the case for well-being education, convincing the education policy-makers, managers and teachers that happiness, however lightly it may sound, is a worthy subject to be taken seriously.

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No potential conflict of interest was reported by the authors.

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## References

- Barber, B. K., & Olsen, J. A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19*, 3–30.
- Blyth, D. A., Simmons, R. G., & Bush, D. (1978). The transition into early adolescence: A longitudinal comparison of youth in two educational contexts. *Sociology of Education, 51*, 149–162.
- Boniwell, I., & Ryan, L. (2012). *Personal well-being lessons for secondary schools: Positive psychology in action for 11 to 14 year olds: Positive psychology in action for 11 to 14 year olds*. Maidenhead: McGraw-Hill International.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101.
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology, 77*, 1042–1054.
- Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. *Psychosomatic Medicine, 70*, 741–756.
- Craig, C. (2007). *Creating confidence: A handbook for professionals working with young people*. Glasgow: The Centre for Confidence and Well-being.
- De Neve, J.-E., Diener, E., Tay, L., & Xuereb, C. (2013, August). *The objective benefits of subjective well-being* (CEP Discussion Papers. No. 1236). Retrieved August 08, 2014, from <http://cep.lse.ac.uk/pubs/download/dp1236.pdf>
- Department for Education and Skills. (2005). *Excellence and enjoyment: Social and emotional aspects of learning: Guidance*. Nottingham: Author.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being, 3*(1), 1–43.
- Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. (2009). *Well-being for public policy*. New York, NY: Oxford University Press.
- Doddington, C., Flutter, J., & Rudduck, J. (1999). Exploring and explaining 'dips' in motivation and performance in primary and secondary schooling. *Research in Education, 61*, 29–38.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405–432.
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., ... Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Fenouillet, F. (2013, November 21–22). *Quelles relations entre la motivation et le bien-être des élèves?* [What is the relationship between motivation and well-being of pupils?] Paper presented at the Psychologie Positive & Modernité: Francophone Congress of Positive Psychology, Metz.
- Findlay, L. C., Coplan, R. J., & Bowker, A. (2009). Keeping it all inside: Shyness, internalizing coping strategies and socio-emotional adjustment in middle childhood. *International Journal of Behavioral Development, 33*, 47–54.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218–226.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation design. *Educational Evaluation and Policy Analysis, 11*, 255–274.
- Haraldsson, K. S., Lindgren, E. C. M., Fridlund, B. G., Baigi, A. M., Lydell, M. C., & Marklund, B. R. (2008). Evaluation of a school-based health promotion programme for adolescents aged 12–15 years with focus on well-being related to stress. *Public Health, 122*, 25–33.
- Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. A., & Agrawal, S. (2010). Causal impact of employee work perceptions on the bottom line of organizations. *Perspectives on Psychological Science, 5*, 378–389.
- Huebner, E. S. (1991). Initial development of the students' life satisfaction scale. *School Psychology International, 12*, 231–240.
- Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment, 6*, 149–158.
- Huebner, E. S., & Gilman, R. (2002). An introduction to the multidimensional students' life satisfaction scale. *Social Indicators Research, 60*, 115–122.
- Isen, A. M. (2001). An influence of positive affect on decision making in complex situations: Theoretical issues with practical implications. *Journal of Consumer Psychology, 11*, 75–85.
- Kam, C. M., Greenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. *Prevention Science, 4*, 55–63.
- Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., ... Cullen, C. (2013). Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study. *The British Journal of Psychiatry, 203*, 126–131.
- Laurent, J., Catanzaro, S. J., Joiner, T. E., Rudolph, K. D., Potter, K. I., Lambert, S., ... Gathright, T. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment, 11*, 326–338.
- Leadbeater, B. J., Kuperminc, G. P., Blatt, S. J., & Hertzog, C. (1999). A multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Developmental Psychology, 35*, 1268–1282.
- Lendrum, A., Humphrey, N., Kalambouka, A., & Wigelsworth, M. (2009). Implementing primary Social and Emotional Aspects of Learning (SEAL) small group interventions: Recommendations for practitioners. *Emotional and Behavioural Difficulties, 14*, 229–238.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*, 803–855.
- Marks, N., Shah, H., & Westfall, A. (2004). *The power and potential of well-being indicators: Measuring young people's well-being in Nottingham*. London: New Economics Foundation.
- Martin-Krumm, C., Oger, M., & Sarrazin, P. (2009). College pupils' Burnout in France: Links to motivation and evolution during a school year. In T. Freire (Ed.), *Understanding positive life. Research and practice on positive psychology* (pp. 251–269). Lisboa: Climepsi Editores.
- McGrath, H., & Noble, T. (2003). *Bounce back. Teacher's handbook*. Port Melbourne: Pearson Education.
- Noble, T., & McGrath, H. (2013). Well-being and resilience in education. In S. A. David, I. Boniwell, & A. C. Ayers (Eds.), *The Oxford handbook of happiness* (pp. 563–578). Oxford: Oxford University Press.

- Noble, T., McGrath, H., Roffey, S., & Rowling, L. (2008). *Scoping study into approaches to student wellbeing*. Sydney: Australian Catholic University and Erebus International.
- Noddings, N. (2003). *Happiness and education*. Cambridge: Cambridge University Press.
- Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling designs in qualitative research: Making the sampling process more public. *The Qualitative Report*, *12*, 238–254.
- Patton, G., Bond, L., Butler, H., & Glover, S. (2003). Changing schools, changing health? Design and implementation of the Gatehouse Project. *Journal of Adolescent Health*, *33*, 231–239.
- Priller, E., & Schupp, J. (2011). Social and economic characteristics of financial and blood donors in Germany. *DIW Economic Bulletin*, *6*, 23–30.
- Ricard, M. (2003). On the relevance of a contemplative science. In B. A. Wallace (Ed.), *Buddhism and science: Breaking new ground* (pp. 261–279). New York, NY: Columbia University Press.
- Robson, C. (2002). *Real world research* (2nd ed.). Malden: Blackwell Publishing.
- Rudduck, J., Chaplain, R., & Wallace, G. (Eds.). (1996). *School improvement: What can pupils tell us?* London: David Fulton.
- Ruini, C., Ottolini, F., Tomba, E., Belaise, C., Albieri, E., Visani, D., ... Offidani, E. (2009). School intervention for promoting psychological well-being in adolescence. *Journal of Behavior Therapy and Experimental Psychiatry*, *40*, 522–532.
- Salmela-Aro, K., Kiuru, N., Pietikäinen, M., & Jokela, J. (2008). Does school matter? *European Psychologist*, *13*, 12–23.
- Seldon, A., & Morris, I. (2007). Should schools be teaching happiness? *Education Review*, *20*, 44–49.
- Seligman, M. (1998). Building human strength: Psychology's forgotten mission. *APA Monitor*, *21*, 1–2.
- Seligman, M., Ernst, R., Gillham, J., & Reivich, K. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, *35*, 293–311.
- Shoshani, A., & Steinmetz, S. (2014). Positive psychology at school: A school-based intervention to promote adolescents' mental health and well-being. *Journal of Happiness Studies*, *15*, 1289–1311. doi:10.1007/s10902-013-9476-1
- Suissa, J. (2008). Lessons from a new science? On teaching happiness in schools. *Journal of Philosophy of Education*, *42*, 575–590.
- Suldo, S. M., Savage, J. A., & Mercer, S. H. (2014). Increasing middle school students' life satisfaction: Efficacy of a positive psychology group intervention. *Journal of Happiness Studies*, *15*, 19–42.
- Tabachnik, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston, MA: Pearson Education.
- Tomba, E., Belaise, C., Ottolini, F., Ruini, C., Bravi, A., Albieri, E., ... Rafanelli, C. (2010). Differential effects of well-being promoting and anxiety-management strategies in a non-clinical school setting. *Journal of Anxiety Disorders*, *24*, 326–333.
- Wigelsworth, M., Humphrey, N., Kalambouka, A., & Lendrum, A. (2010). A review of key issues in the measurement of children's social and emotional skills. *Educational Psychology in Practice*, *26*, 173–186.
- Wigfield, A., Eccles, J. S., Mac Iver, D., Reuman, D. A., & Midgley, C. (1991). Transitions during early adolescence: Changes in children's domain-specific self-perceptions and general self-esteem across the transition to junior high school. *Developmental Psychology*, *27*, 552–565.
- World Health Organization. (1948/2006). Constitution of the World Health Organization (WHO). Author. Retrieved April 23, 2014, from [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)