

PROMOTING SUBJECTIVE WELLBEING THROUGH A KINDNESS INTERVENTION

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Abstract: The present study aimed to examine the effects of the character strength of kindness on subjective wellbeing. It was conducted through an online free forum, which was constructed for the present study. The participants ($N = 54$) were 34 women and 20 men, aged 18-55 years old. They were divided into two groups, an experimental and a control group, matched in age and gender. Participants in the ‘counting kindness’ intervention were asked to keep track of their kind actions every day for a week and write them on the forum along with their feelings and thoughts on those actions. Participants in the control group were asked to write their daily routine also every day for a week. Participants were also asked to complete questionnaires measuring subjective wellbeing before the intervention, a month after, and two months after the intervention (follow-up measurement). The results showed that subjective wellbeing as an overall sense of wellbeing and its specific components was enhanced for participants in the kindness intervention. Possible mechanisms for the effectiveness of the intervention are discussed.

Key words: Character strengths, Engagement, Kindness, Positive psychology, Virtues

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Since World War II psychology has focused mostly on psychopathology and its causes. Psychologists and researchers were trying exclusively to understand and prevent dysfunctional thinking and behavior. This massive focus on personal weaknesses led the science of psychology to be considered as science of mental illness (Seligman & Csikszentmihalyi, 2000). In the beginning of 21st century a new discipline in psychology was born. This discipline is *Positive Psychology*. Martin Seligman is one of the founders of the emerging field of Positive Psychology. Shifting the attention away from personal weakness and pathology, positive psychology seeks to remind us that positive aspects of human existence such as resilience, growing into talents, optimism and positive affect make up the main components of happiness and mental health. In other words, according to the Positive Psychology movement, psychology is not focused only on the study of pathology and mental illness but is reoriented on the study of character strengths and virtues (Seligman & Csikszentmihalyi, 2000; Peterson, 2006). Moreover, positive psychology places emphasis on personal experiences and the interpretations individuals give to them (Efklides & Moraitou, 2013a; Σταλίκας & Μυτσκίδου, 2011). In this light, the present study focused on the effects of an intervention developed to cultivate the person's experiences of kindness, a manifestation of humanity which is considered character strength according to positive psychology on subjective wellbeing in adults.

Happiness and subjective wellbeing

Subjective wellbeing (SWB) is a complex concept that captures the person's perception of different aspects of their life. SWB comprises of evaluative judgments, opinions, positive experiences and frequency of positive and negative affect (Efklides & Moraitou, 2013b; Eid & Larsen, 2008). It has two main components: The *cognitive component* refers to 'life satisfaction' and includes the person's evaluative judgments of their past. The *affective component* of SWB refers to the relative prevalence of positive affect over the negative (also called happiness). Usually, there is a correlation between the cognitive and affective component of wellbeing (Eid & Larsen, 2008). It is worth mentioning that there is no single determinant of SWB. Factors that impact SWB are, for example, personality characteristics such as extraversion and neuroticism and socioeconomic conditions (Eid & Larsen, 2008). Extraversion is related to feeling more positive emotions than negative; extraverted individuals experience high vigor and are social and open towards others. On the other hand, neuroticism is related to feeling negative emotions such as anxiety and hostility. Regarding the socioeconomic factors people

in poorer countries differ significantly from people in richer countries and indicate lower levels of SWB (Eid & Larsen, 2008), although higher wealth does not necessarily mean higher SWB (Efklides & Moraitou, 2013b). According to Martin Seligman, SWB is a construct, a conceptual object that has no concrete tangible or observable existence but can only be inferred from its elements (Seligman & Csikszentmihalyi, 2000).

The most influential theory about SWB as the overall sense of wellbeing and its elements is the PERMA theory (Seligman, 2011). PERMA theory posits that there are five pillars of individual psychological flourishing: (a) Experiencing positive emotions in everyday life (P): This presupposes being able to focus on positive emotions, that is, being optimistic and viewing the past, present and future in a positive perspective; (b) Experiencing psychological flow, absorption, engagement and satisfaction in everyday activities (E): Engagement in activities in our lives is important to learn, grow, and nurture our personal happiness; (c) Building positive relationships characterized by support, warmth, and love (R): Strong positive relationships include trusting others and giving or receiving support in difficult times; (d) Having a meaningful life and a sense of purpose in one's life makes the person feel that everything matters (M): Rather than engaging in pursuit of pleasure and material wealth the person looks for actual meaning in life. This provides a direction to follow; (e) Feeling competent and efficient because of the accomplishment of personal goals (A).

Another issue in the relevant research is whether it is possible to design interventions that can improve people's sense of wellbeing. This is where positive psychology and SWB research meet (Efklides & Moraitou, 2013b). Intervention programs have been developed within the field of positive psychology in order to increase people's sense of wellbeing—hence forth called *Positive Psychology Interventions (PPIs)*. PPIs are defined as “treatment methods or intentional activities that aim to cultivate positive feelings, behaviors or cognitions” (Sin & Lyubomirsky, 2009, p. 467). PPIs used to increase happiness include expressing gratitude, writing three funny things every day for a week or even using one's main strengths in a new way (Cummins, 2013; Mongrain & Anselmo-Matthews, 2012; Proyer, Gander, Wellenzohn, & Ruch, 2014; Sheldon & Lyubomirsky, 2007). PPIs are also implemented online through the internet (Mitchell, Vella-Brodnick, & Klein, 2010). Recently, two meta-analyses (Bolier, Haverman, Westerhof, Riper, Smit, & Bohlmeijer, 2013; Sin & Lyubomirsky, 2009) provide support for the effectiveness of PPIs in clinical samples with increases in subjective wellbeing and amelioration of depression. The theoretical underpinnings of PPIs that explain their effectiveness come from the Broaden-

and-Build theory (Fredrickson, 2004). This theory explains how the experiencing of positive emotions that can emerge from the interventions broadens a person's repertoire of action and thought. Specifically, the Broaden-and-Build theory posits that experiencing positive emotions (a) increases the amount of information, which is allowed to get into the system, and thus broadens the individual's repertoire of thoughts and behaviors (Fredrickson, 2004); (b) becomes the starting point of an upward spiral, which facilitates the experiencing of more positive emotions (Fredrickson & Joiner, 2002); (c) provides psychological and physical resources that last in time, nourish resilience and guard against adversities (Fredrickson, 2003; Tugade & Fredrickson, 2004), and (d) undoes the displeasing consequences of experiencing negative emotions (Fredrickson, Mancuso, Branigan, & Tugade, 2000).

Character strengths

Since positive psychology has refocused scientific attention on character strengths and virtues (Σταλίκας & Μυτσκίδου, 2011), some studies practicing PPIs use one's character strengths. Character strengths are the psychological ingredients processes or mechanisms that underlie virtues. They are defined as positive traits reflected in one's thoughts, feelings and behavior (Park, Peterson, & Seligman, 2004).

Character strengths and virtues are measured with the 'Values in Action (VIA) Classification of Strengths' developed by Peterson and Seligman (2004). In the VIA-classification there are the six distinct dimensions, namely, the strengths of wisdom and knowledge, courage, humanity, justice, temperance, and transcendence (Peterson & Seligman, 2004). These dimensions represent the desired characteristics people have, which create a healthy, high functioning positive personality (Σταλίκας & Μυτσκίδου, 2011). The VIA classification suggests that character strengths are affected by individual differences factors but can also be shaped by the influences each person has from their environment (Peterson & Seligman, 2004).

The more individuals identify, label, cultivate, and practice their character strengths, the more gains they have for their wellbeing levels (Baer, 2015; Peterson & Seligman, 2004; Proyer, Gander, Wellenzohn, & Ruch, 2015). There is abundance of evidence showing the association of character strengths with wellbeing indicators (e.g., Berthold & Ruch, 2014; Martinez-Marti & Ruch, 2014; Park et al., 2004; Proyer, Gander, Wyss, & Ruch, 2011). Based on such evidence, interventions were conducted aiming to foster individuals' character strengths. They focused mainly on the person's signature, or their lesser characterizing, strengths

(Proyer et al., 2015; Seligman, Steen, Park, & Peterson, 2005). The results of these studies showed a strong connection between character strengths interventions and wellbeing in the short run but also after a three months period (e.g. Gander, Proyer, Ruch, & Wyss, 2013; Mongrain & Anselmo-Matthews, 2012; Proyer et al., 2015; Seligman et al., 2005).

Kindness

The character strength of ‘*Humanity*’ refers to virtues and intrapersonal characteristics that people display when they socialize with each other. One of the virtues that constitute humanity is kindness (Donaldson, Csikszentmihalyi, & Nakamura, 2011; Seligman et al., 2005; Schwartz, Quaranto, & Gray, 2013). Kindness as a characteristic can be defined by generosity, caring, altruistic love and compassion. Kindness entails enacting kind behavior toward other people. It is the tendency to be compassionate, caring and do benevolent deeds without expecting necessarily some benefit in return. Moreover, it is important to notice that kindness is not expressed only in someone’s environment but also to strangers and people that someone has never met before (Donaldson et al., 2011).

Otake, Shimai, Tanaka-Matsumi, Otsui and Fredrickson (2006) investigated the effects on SWB of a counting kindness intervention that was targeted to Japanese undergraduate students. For the first part, 119 female undergraduate students were assigned to the intervention and control group. Participants were asked to observe their own kind behavior toward other people and report it for a week. The Japanese Subjective Happiness Scale (JSHS) was administered one month before and one month after the end of the one-week intervention (Shimai, Otake, Utsuki, Ikemi, & Lyubomirsky, 2004). The researchers found a significant increase between the baseline and follow-up scores on happiness in the experimental group but not in the control group. There was also a significant difference in happiness scores between the intervention and control group at follow up.

Another study designed by Gander et al. (2012) examined the impact of nine strengths-based positive interventions on wellbeing and depression. Among the aims of the study was to test the effectiveness of the counting kindness intervention in an online setting. Participants were mostly female who were assigned to one of nine intervention groups and to the placebo control group. Participants in the placebo control group were instructed to write down something from their early memories on a daily basis for a week. One of the intervention groups was the ‘counting kindness’ group and they had to count and report the acts of kindness they had performed also for a week. Two self-report measures of happiness and

depressive symptoms, respectively, were administered before and after the intervention. There were four follow-up assessments. The results showed increases in happiness and alleviation of depressive symptoms in a time span of six months for most of the interventions in comparison with the baseline assessment. Also, in comparison to the placebo control group happiness was increased for participants in all the intervention groups except one, that is, the group assigned to the ‘three good things’ intervention.

The present study

Considering the still few intervention studies on kindness, the present study aimed to replicate their findings in a different sample in terms of age and gender. Men were also recruited to participate unlike the other studies in which women took part; also, participants represented a larger age span and professional occupations and not only students. Hence, the present study aimed to investigate the effects of the ‘counting kindness’ intervention on adults’ SWB.

The hypothesis of the study was that participants in the experimental group, that is, the ‘counting kindness’ group would report increased levels of SWB, defined as (a) happiness and (b) psychological flourishing as an overall sense of wellbeing and its specific components, and would maintain these levels for two months after the intervention, compared to participants in the control group.

METHOD

Design and Participants

The study adopted an online, 2 (groups: experimental, control) x 3 (times: pre-, post-, follow-up) intervention design.

A total of 54 persons, who participated in the study voluntarily, comprised the convenience sample of the study. They were randomly assigned to the experimental and the control groups. From the initial 60 persons who agreed to participate, 54 completed the pretest, the posttest, and the follow-up assessments. In the experimental group there were 10 males and 20 females; Two thirds of them ($n = 20$, 66.7%) were young adults and the rest ($n = 10$, 33.3%) were middle aged adults. Twenty-two of them (73.3%) had a university degree. In the control group there were 10 males and 14 females; eighteen of them (75%) were young adults, whereas 25% ($n = 6$) were middle aged adults. Finally, 19 (79.2%) participants in the control

group had a university degree. The two groups did not differ significantly in age, $\chi^2(1) = .561, p > .05$ (experimental group: age-range = 18 - 55 years, $M = 33.2$ years, $SD = 12.62$; control group: age-range: 20 - 55 years, $M = 32.6$ years, $SD = 12.41$). They also did not differ significantly in educational level, $\chi^2(1) = .753, p > .05$, and gender, $\chi^2(1) = .580, p > .05$.

Potential participants who were currently undergoing psychotherapeutic or psychopharmacological treatment or reported the use of psychotropic or illegal drugs were excluded from the study.

Measures

SWB is often used interchangeably with happiness. Happiness reflects the hedonic aspect of quality of life, while recent approaches to SWB such as Seligman's PERMA theory (Seligman, 2011), highlight the eudaemonic aspect of it (Efklides & Moraitou, 2013a). For this reason, two measures of SWB were used in this study to examine both aspects of it.

The Subjective Happiness Scale

The Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999; Greek version: see Karakasidou, Pezirkianidis, Stalikas, & Galanakis [2016] for internal consistency and factorial validity). The SHS is a 4-item measure of subjective chronic happiness and each item is rated in a 7-point Likert -type response scale. The SHS has satisfactory reliability and the factorial structure of the scale fits with the one found in other cultures (Karakasidou et al., 2016). In the present study Cronbach's alpha was .77 in the pretest, .79 in the posttest, and .84 in the follow-up.

The PERMA-Profiler

The PERMA-Profiler (Seligman, 2011; Greek version: Pezirkianidis & Stalikas, 2018) defines five major pillars that together contribute to a person's sense of wellbeing; specifically, the term 'PERMA' represents the pillars of positive emotions, engagement, relationships, meaning, and accomplishment (measured by three items each). Also, an overall wellbeing score can be computed as the mean of the five subscales total scores and a single item tapping Overall Happiness. Moreover, seven items measuring health, negative emotions, and loneliness are also included in the questionnaire giving complementary information about other wellbeing indices. However, this information was not used in the present study.

Hence, the measure consists in total of 23 items scored on an 11-point Likert-type scale anchored by '0 = never' to '10 = always' or '0 = not at all' to '10 = completely'.

The factorial structure of the PERMA-Profiler scale has been confirmed in a Greek sample (Pezirkianidis & Stalikas, 2018) and was found to consist of five factors, corresponding to the original structure. Cronbach's alphas for each factor, as calculated for the original instrument and the Greek version, respectively, were as follows: for Positive affect: $\alpha = .88$ and $\alpha = .85$, for Engagement: $\alpha = .72$ and $\alpha = .57$, Relationships: $\alpha = .82$ and $\alpha = .75$, Meaning: $\alpha = .90$ and $\alpha = .78$, and Accomplishment: $\alpha = .79$ and $\alpha = .73$. Also, both in the original study and the validation study in Greece, the measure demonstrated acceptable cross-time stability, and evidence for convergent and divergent validity. However, the findings of both studies suggest that researchers should interpret the results concerning the Engagement subscale with caution, since it demonstrates marginal to unacceptable Cronbach's alpha and Spearman-Brown values of internal consistency ranging from .53 to .81 for the construction sample and between .40 and .73 for the Greek sample. The Cronbach's alphas for each factor in the present study were: for Positive Affect, $\alpha = .85$, Engagement, $\alpha = .27$, Relationships, $\alpha = .79$, Meaning, $\alpha = .76$, and Accomplishment, $\alpha = .63$.

Intervention and Procedure

Participants were instructed to register on an online free forum. This forum was especially designed for this study. After registration, all participants completed informed consent forms and basic demographic questionnaires. They were also reminded that they could abandon the study at any time. Then, they were instructed to complete the measures of the SHS and PERMA-Profiler before the intervention, a month later (at the end of the intervention) and two months after the end of the intervention (follow-up).

The measures were administered online using Google forms. The participants who completed the measures at the pretest were randomly assigned to either the experimental group of 'counting kindness' or the control condition (writing their daily routines) and received their assigned exercise which had to be conducted every day for one week. Those in the experimental group were given instructions to become more observant of their own kind behavior toward other people. They were also asked to count the daily acts of kindness they performed and write them online on the forum, along with feelings and thoughts they might have had during these acts. However, the definition of a kind act was left open for participants to define.

On the other hand, the participants in the control condition were instructed to write online each day just their daily routine.

Although participants wrote their exercise on the forum, no one besides the researcher could read another participant's text or had access to it or had access to the answers from the measures completed. This procedure ensured confidentiality throughout the whole process.

Examples of responses to the assigned exercise of the daily acts of kindness are:

- (a) 'Today on my way back home from work, I found on the street a few-months old puppy (probably abandoned). Without any second thought I took it with me to feed it and keep it warm for as long as I find someone who wants to adopt it. While I am so angry with whomever did it I am in peace and feel good with myself for saving the puppy.'
- (b) 'I offered to cover a shift at work for a coworker, although I had my day-off. I did not regret it at all because at the end of the day I felt really helpful when I made my coworker feel relieved.'
- (c) 'I did some important errands in deadline for a friend because she did not have much time. At the end of the day I was feeling happy and good with myself because I could remember the smile on the face of my friend.'

Examples of responses to the assigned exercise on the daily routine are the following:

'It was a relaxing day. I took care of some important things at work and I contacted a few close relatives to hear from them after a long time'.

'Today was a stressful day because I had to study all day long due to exams at the university. I spent most of the day at the library lost in my books, taking notes. When I returned home I was feeling mentally exhausted and decided to watch television for a while before I go to bed'.

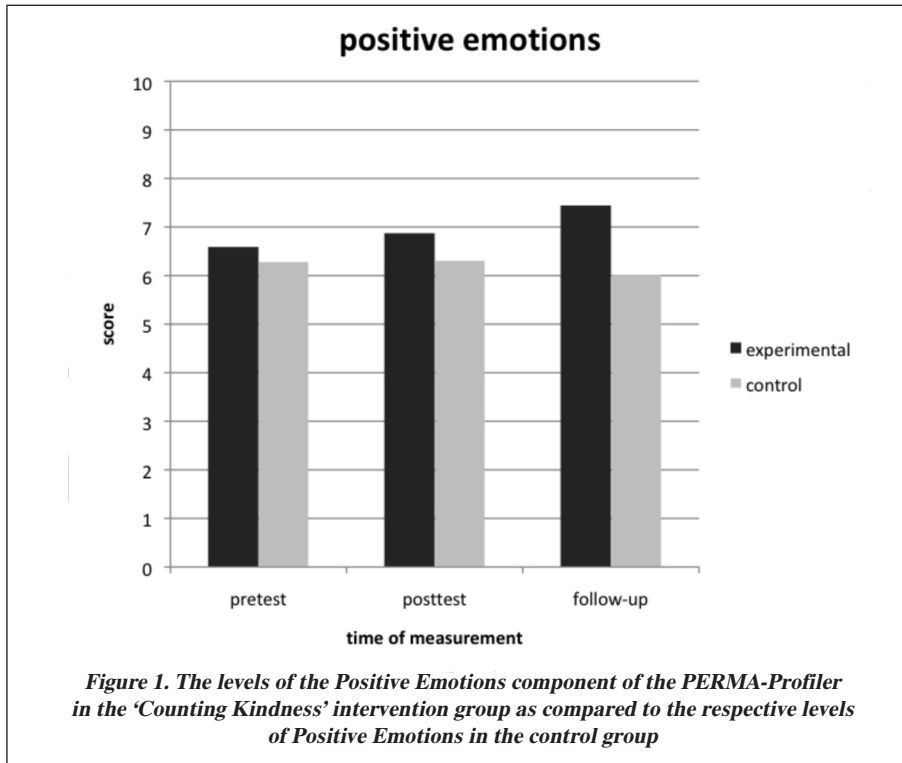
RESULTS

The effect of group and assessment time

Subjective Happiness Scale data were analyzed with a 2 (group: experimental-control) x 3 (time of assessment: pretest, posttest, follow up) mixed measures ANOVA. There was a main effect of group, $F(1, 52) = 5.12, p = .028, \eta_p^2 = .09$, and

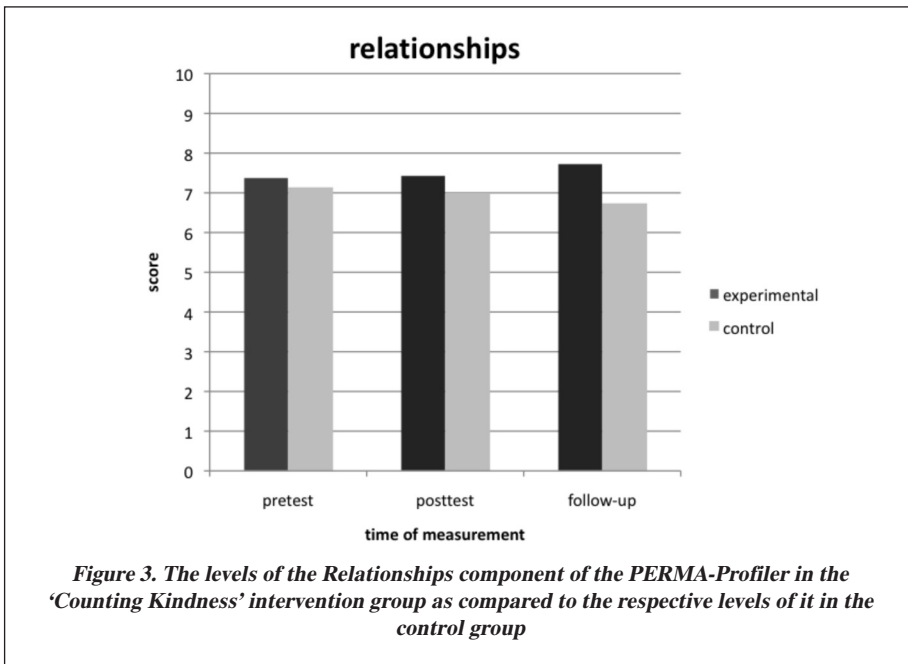
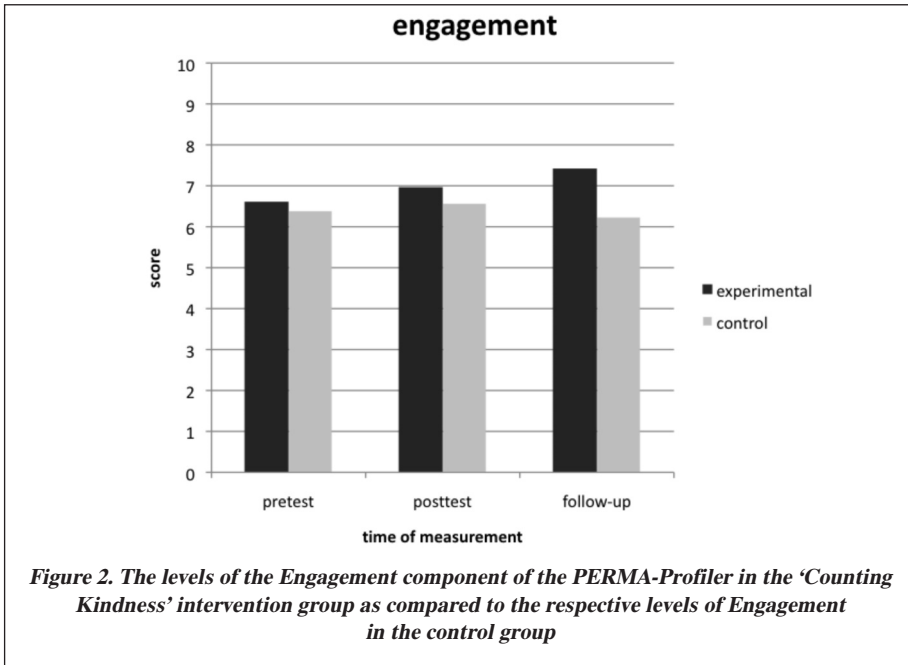
of time of assessment, $F(2, 51) = 9.17, p < .001, \eta_p^2 = .27$. There was also a significant interaction effect, $F(2, 51) = 15.79, p < .001, \eta_p^2 = .38$. In regards the main effect of the within-subjects factor, Bonferroni pairwise comparisons showed that the follow-up SHS score was significantly higher than the other two scores, $I_{\text{pretest-J}} = .028, p = .01$ and $I_{\text{posttest-J}} = .023, p = .001$. Further, a series of one-way ANOVAs showed that there was a significant effect of group on SHS in the pretest, $F(1, 52) = 4.40, p < .05, \eta_p^2 = .08$, and in the follow-up condition, $F(1, 52) = 11.51, p = .001, \eta_p^2 = .18$. The experimental group scored slightly higher in the pretest and higher in the follow-up, compared to the control group. Given that there was found a significant difference of the two groups in the pretest level of SHS score, we decided to proceed using mixed measures ANCOVA (between subjects factor: group, with two levels: experimental-control; within subjects factor: time of assessment, with two levels: posttest, follow up; covariate: pretest), in order to eliminate possible confounds. We first confirmed that the assumption of independence of the covariate (pretest SHS score) and treatment (group of intervention) effect was satisfied, $F(1, 51) = 3.66, p > .05$. At the next step, we examined if the assumption of homogeneity of regression slopes was satisfied by plotting a scatterplot for each experimental condition and we found that the regression lines for each scatterplot look more or less the same. We then ran full-factorial mixed measures ANCOVA. The results showed that there was not any interaction effect of the within subjects factor (time of assessment, with two levels: posttest, follow up) and the covariate (pretest SHS score), $F(1, 51) = 1.04, p > .05$. However, there was a significant effect of the covariate (pretest SHS score) on the average SHS score regarding the posttest and follow up assessments, $F(1, 51) = 105.747, p < .001, \eta_p^2 = .67$, which turned the effect of the between subjects factor (group: experimental, control) from significant to nonsignificant, $F(1, 51) = .65, p > .05$. Hence, the main effect of the between-subjects factor covaried with the pretest SHS score and the findings should be treated with caution.

The application of 2 (group) x 3 (time of assessment) mixed measures ANOVA to the data for the *Positive emotions* subscale of the PERMA-Profilier indicated that there was a marginally significant main effect of group, $F(1, 52) = 4.43, p < .05, \eta_p^2 = .08$. The main effect of time of assessment was not significant. However, there was a significant interaction effect, $F(2, 51) = 17.50, p < .001, \eta_p^2 = .41$. A series of one-way ANOVAs showed that there was a significant effect of group on Positive emotions only in the follow-up assessment, $F(1, 52) = 15.76, p < .001, \eta_p^2 = .23$. The experimental group scored higher in the 'follow-up' assessment ($M = 7.44, SD = 1.34$) compared to the control group ($M = 6.02, SD = 1.24$).

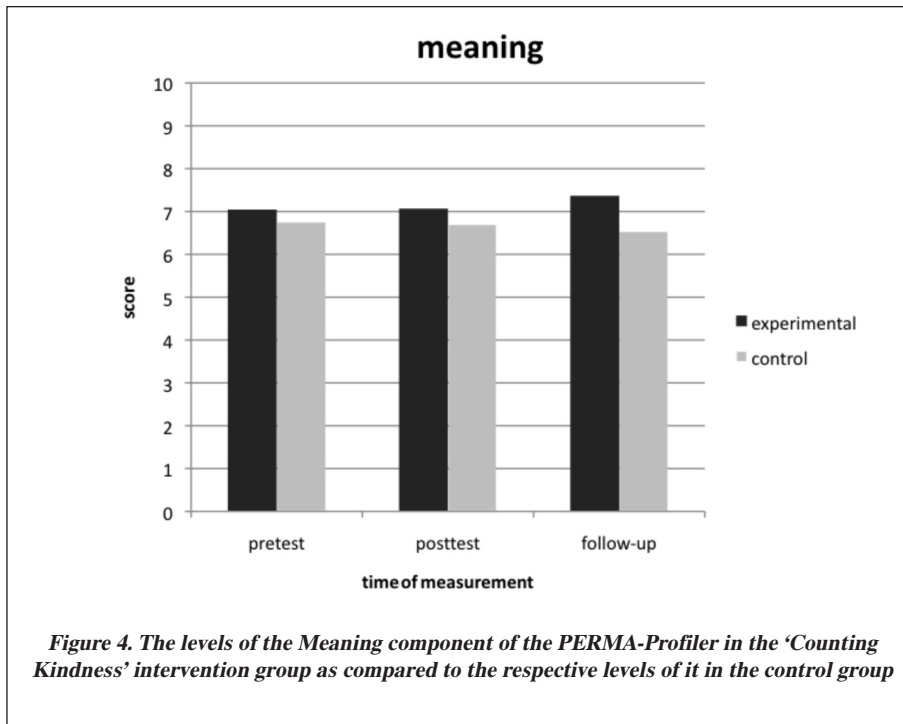


The 2 (group) x 3 (time of assessment) mixed measures ANOVA applied on the data of the Engagement subscale of the PERMA-Profiler, showed no significant main effect of group or assessment time. However, there was a significant interaction effect, $F(2, 51) = 12.87, p < .001, \eta_p^2 = .34$. A series of one-way ANOVAs showed that there was a significant effect of group only in the follow-up assessment, $F(1, 52) = 10.71, p = .002, \eta_p^2 = .17$. Again, the experimental group ($M = 7.42, SD = 1.30$) scored higher compared to the control group ($M = 6.25, SD = 1.31$) (see Figure 2).

Respectively, the application of 2 (group) x 3 (time of assessment) mixed measures ANOVA to the data of the Relationships subscale of the PERMA-Profiler showed that there was only a significant interaction effect of group with assessment time, $F(2, 51) = 9.82, p < .001, \eta_p^2 = .28$. Again, a series of one-way ANOVAs showed that there was a significant effect of group on Relationships only in the follow-up assessment, $F(1, 52) = 4.86, p < .05, \eta_p^2 = .08$. The experimental group ($M = 7.74, SD = 1.78$) scored higher in the follow-up compared to the control group ($M = 6.73, SD = 1.51$) (see Figure 3).

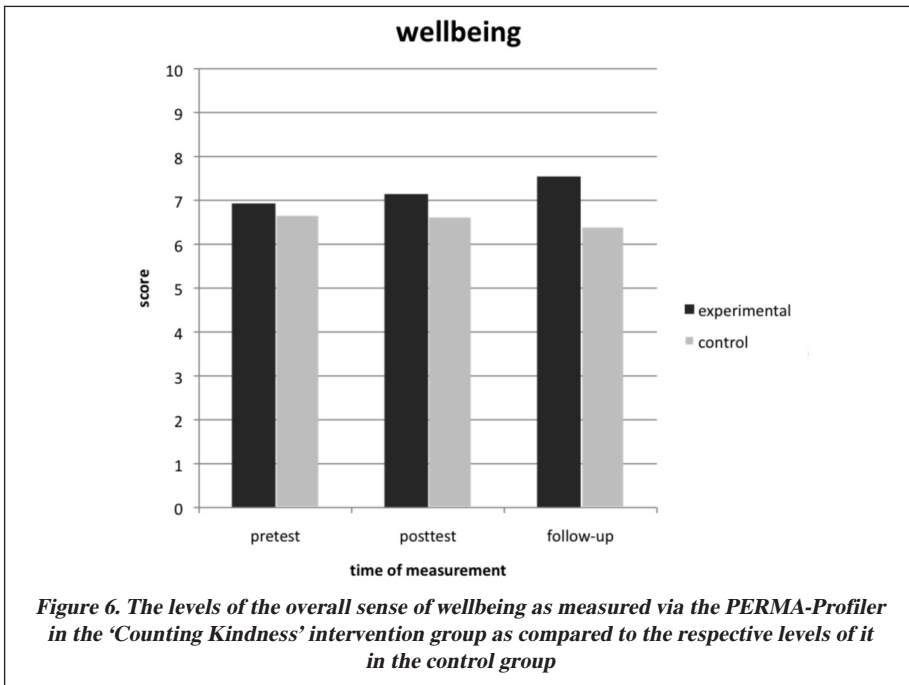
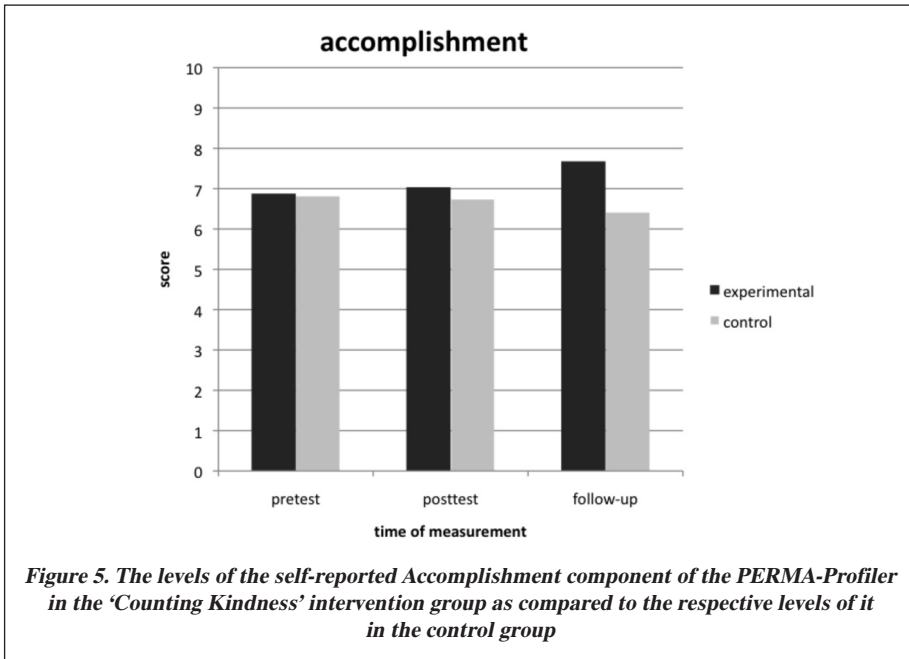


The 2 (group) x 3 (time of assessment) mixed measures ANOVA to the data of the Meaning subscale of the PERMA-Profilier indicated that there was only a significant interaction effect, $F(2, 51) = 3.92, p = .02, \eta_p^2 = .13$. A series of one-way ANOVAs showed that there was a significant effect of group on Meaning only in the follow-up condition, $F(1, 52) = 5.09, p < .05, \eta_p^2 = .09$. As expected, the experimental group ($M = 7.36, SD = 1.39$) scored higher in the follow-up measurement compared to the control group ($M = 6.52, SD = 1.31$) (see Figure 4).



The 2 (group) x 3 (time of assessment) mixed measures ANOVA on the data of the Accomplishment subscale of the PERMA-Profilier also indicated only a significant interaction effect, $F(2, 51) = 7.05, p = .002, \eta_p^2 = .22$. A series of one-way ANOVAs showed that there was a significant effect of group on Accomplishment only in the follow-up assessment, $F(1, 52) = 13.71, p = .001, \eta_p^2 = .21$. The experimental group ($M = 7.67, SD = 1.34$) scored higher in the follow-up measurement compared to the control group ($M = 6.43, SD = 1.06$) (see Figure 5).

Finally, the application of 2 (group) x 3 (time of assessment) mixed measures ANOVA on the data of the Wellbeing indicator as measured in the PERMA-



Profiler showed a significant interaction effect, $F(2, 51) = 17.91, p < .001, \eta_p^2 = .41$. One-way ANOVAs showed that there was a significant effect of group on Wellbeing indicator only in the follow-up measure, $F(1, 52) = 17.33, p = .001, \eta_p^2 = .21$. The experimental group ($M = 7.54, SD = 1.15$) scored higher in the follow-up measurement compared to the control group ($M = 6.40, SD = 1.08$) (see Figure 6).

To further examine in more detail the role of the assessment time in SWB, a series of repeated-measures ANOVAs were conducted for the experimental group and the control group independently. The ANOVAs in the experimental group showed a main effect of assessment time on the SHS score, $F(2, 28) = 20.81, p < .001, \eta_p^2 = .60$, Positive emotions, $F(2, 28) = 13.65, p < .001, \eta_p^2 = .49$, Engagement, $F(2, 28) = 14.54, p < .001, \eta_p^2 = .51$, Accomplishment, $F(2, 28) = 4.25, p = .02, \eta_p^2 = .23$, and Wellbeing, $F(2, 28) = 11.82, p < .001, \eta_p^2 = .46$, subscales of the PERMA-Profiler. The follow-up score was significantly higher than the pretest and posttest scores, $p < .01$ to $.001$. Hence, the intervention had successfully enhanced SWB but only in the long run and not immediately after its conclusion. The repeated-measures ANOVAs conducted on the data of the control group indicated that there were no significant differences in the scores in terms of time of measurement.

DISCUSSION

The aim of this study was to examine the effects of a ‘counting kindness’ intervention on SWB. The hypothesis was that participants in the experimental group would report increased levels of SWB after the intervention compared to the control group. Furthermore, this positive effect would be maintained after the intervention. These predictions were partly confirmed since there was increase in the overall sense of wellbeing as well as in specific components of it only in the follow up measurement, that is, two months after the completion of the intervention. Moreover, no clear evidence in regards happiness, that is, the hedonic aspect of SWB was found.

Kindness intervention and effects on SWB

Based on the findings, any positive effect of the kindness intervention on happiness as measured by the SHS could not be supported due to the difference in the initial level of happiness of the experimental and the control group. More research is needed to reveal if the variable of the initial level of subjective happiness could act as a moderator or a mediator which can be involved in the enhancement of

subjective happiness after two months of the kindness intervention in the experimental group as compared to the control group.

On the other hand, the results from the PERMA-Profiler provide evidence for the effectiveness of the ‘counting kindness’ intervention. The PERMA-Profiler measures participants’ sense of wellbeing in terms of specific psychological components of it as well as the overall sense of wellbeing. Contrary to the findings regarding the SHS scores, Wellbeing level as measured via the PERMA-Profiler did not differ at the pretest assessment between the two groups and was elevated in participants who were asked to count the kind actions they had performed every day for a week and consider feelings they might have had after those actions. This finding is in accordance with Sheldon and his colleagues’ theory (2001), according to which people who perform positive activities such as helping someone, have a higher level of positive affect, positive thoughts, and positive behaviors, which can eventually lead to increases in overall wellbeing (see also Sin & Lyubomirsky, 2009). The ‘Broaden-and-Build’ theory of Fredrickson (2004) and the findings of the research and interventions on character strengths also provide an explanation for the great increase of SWB in the follow-up measurement. In so far as individuals cultivate their character strengths, they experience more positive emotions and feel more satisfied with their lives (Baer, 2015; Peterson & Seligman, 2004; Proyer et al., 2015). Also, as the Broaden-and-Build theory posits, the continuing experience of positive emotions mobilizes an upward spiral and builds psychological, cognitive, interpersonal and physical resources that are long-lasting (Fredrickson, 2003, 2004; Tugade & Fredrickson, 2004). Hence, the findings of the present study confirm the multiple positive effects of continuously practicing character strengths and experiencing positive emotions.

A limitation of the present study is that there was no kindness measure as character strength before or after the intervention. Findings of previous studies, however, suggest that individuals who practice their signature strengths have more gains in wellbeing compared to those who do not practice them (Seligman et al., 2005). The results of the present study support these findings because through the practice of kindness all participants had wellbeing gains, particularly in the long run. This finding is in line with those of Proyer and colleagues (2015), who showed gains on wellbeing indices three months after the intervention.

The effects of the kindness intervention on the components of wellbeing

The PERMA-Profiler defines five major pillars that contribute to a sense of wellbeing. Thus, besides the overall sense, it is important to discuss the results for

each component separately. The results concerning *positive emotions* indicated a great increase in the experimental group. This suggests that ‘counting kindness’ does have an impact on participants’ positive affectivity after a two-month period. It is likely that, by asking participants in the experimental group to consider of their own feelings while performing kind acts, they were directed to become more aware of their emotions, which in the main were positive and thus increased the experienced positivity.

With respect to the other components that contribute to a sense of wellbeing, namely engagement, relationships, meaning, and accomplishment, the results showed similar effects as in positive emotions. The scores tended to be higher in the posttest in comparison to the pre-test, and significantly elevated in the follow-up measurement. According to Values In Action theory (Peterson & Seligman, 2004), when people use their signature strengths – namely, those character strengths that are most essential to who they are – they experience elevated positive feelings which are associated with higher life satisfaction. Although we did not measure directly the signature strengths, and specifically kindness, in our participants, if at least some of them had kindness as their signature strength that could provide a good explanation for the great increase in their sense of wellbeing after the intervention. In any case, the findings indicate that the character strength of kindness can be an important human asset that impacts wellbeing, in general, and each component of it separately. To put it differently, kindness contributes to people’s sense of wellbeing mainly in terms of the eudaemonic aspect of it. Moreover, as practicing kindness increases Relationships, Meaning, and Accomplishment, it increases the likelihood of desirable outcomes such as acceptance of oneself and respect from others as well as achievement of meaningful goals.

It is worth noting that the scores on the Relationship component of the PERMA-Profiler were already high from the pre-tests for both groups, experimental and control. Maybe this finding is associated with the Greek culture. Most likely people in the Greek community consider it very important to have good and strong relationships with other people and especially within family members. Further research is needed to enlighten this finding.

Another possible mechanism behind the increase in the sense of wellbeing is mindfulness. Mindfulness is defined as a state of enhanced attention to and awareness of current experience or present reality (Brown & Ryan, 2003, p. 822; see also Moraitou & Papantoniou, 2012). Participants were asked from the beginning of the intervention to keep track of their kind actions along with their feelings and thoughts they might have during those kind actions. In this way participants had to become more attentive to what is happening in the present time. Thus, thinking

about the kind, good deeds participants did every day for a week made them more mindful of socially desirable actions that were associated with pleasant affect and positive experiences (Sheldon, Elliot, Kim, & Kasser, 2001).

On the other hand, the control group did not show any increase in the sense of wellbeing and each component of it; in fact, the scores remained almost the same or were slightly lower than the respective baseline scores. This is another finding that can also contribute to the recognition of the need to invest in PPIs focusing on human strengths, to enhance wellbeing in people.

Limitations of the study and proposals for future research

A convenience sample was used in this study. This might explain why the experimental and control groups differed in happiness level as measured via the SHS from the beginning. So, we could not draw clear conclusions in regards hedonic wellbeing enhancement as a result of the intervention, because the initial level of subjective happiness should be taken into account in the potential interpretations. Most importantly, in future research it would be useful to investigate in depth the mechanisms through which acts of kindness promote the sense of wellbeing. This presupposes a direct measure of kindness at the pre-and posttest along with other character strengths. This would allow the identification of possible interactions between character strengths in their effect on the sense of wellbeing. Finally, it might be useful to extend the period of the intervention in two weeks and have more follow-up measurements for example in a 6-month period instead of two months.

REFERENCES

- Baer, R. (2015). Ethics, values, virtues, and character strengths in mindfulness-based interventions: A psychological science perspective. *Mindfulness*, 6(4), 956-969.
- Berthold, A., & Ruch, W. (2014). Satisfaction with life and character strengths of non-religious and religious people: It's practicing one's religion that makes the difference. *Frontiers in Psychology*, 5, 876. doi: 10.3389/fpsyg.2014.00876
- Bolier, L., Haverman, M., Westerhof, G., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, 13, 119. doi:10.1186/1471-2458-13-119
- Brown, K. W., & Ryan, M. R. (2003). The benefits of being present: Mindfulness and its role in psychological wellbeing. *Journal of Personality and Social Psychology*, 7(8), 822-848.
- Cummins, R. (2013). Positive psychology and subjective well-being homeostasis: A critical

- examination of congruence. In A. Efklides & D. Moraitou (Eds.), *A positive psychology perspective on quality of life* (pp. 67-86). *Social Indicators Research Series, 51*. Dordrecht, Netherlands: Springer.
- Donaldson, S. I., Csikszentmihalyi, M., & Nakamura, J. (Eds.). (2011). *Applied positive psychology: Improving everyday life, health, schools, work, and society*. London: Routledge Academic.
- Efklides, A., & Moraitou, D. (2013a). Introduction: Looking at quality of life and well-being from a positive psychology perspective. In A. Efklides & D. Moraitou (Eds.), *A positive psychology perspective on quality of life* (pp. 1-15). *Social Indicators Research Series, 51*. Dordrecht, Netherlands: Springer.
- Efklides, A., & Moraitou, D. (Eds.). (2013b). A positive psychology perspective on quality of life. *Social Indicators Research Series, 51*. Dordrecht, Netherlands: Springer.
- Eid, M., & Larsen, J. R. (2008). *The science of subjective wellbeing*. New York, NY: The Guilford Press.
- Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American Scientist, 91*, 330-335.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society of London B, Biological Sciences, 359*, 1367-1378. doi:10.1098/rstb.2004.1512
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13*(2), 172-175.
- Fredrickson, B. L., Mancuso, R. A., Branigan, C., & Tugade, M. M. (2000). The undoing effect of positive emotions. *Motivation and Emotion, 24*, 237-258.
- Gander, F., Proyer, T. R., Ruch, W., & Wyss, T. (2013). Strength-based positive interventions: Further evidence for their potential in enhancing wellbeing and alleviating depression. *Journal of Happiness Studies, 14*, 1241-1259.
- Karakasidou, E., Pezirkianidis, C., Stalikas, A., & Galanakis, M. (2016). Standardization of the Subjective Happiness Scale (SHS) in a Greek Sample. *Psychology, 7*, 1753-1765.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137-155. doi.org/10.1023/A:1006824100041
- Martínez-Martí, M. L., & Ruch, W. (2014). Character strengths and well-being across the life span: Data from a representative sample of German-speaking adults living in Switzerland. *Frontiers in Psychology, 5*. doi.org/10.3389/fpsyg.2014.01253
- Mitchell, J., Vella-Brodick, D., & Klein, B. (2010). Positive psychology and the internet: A mental health opportunity. *Electronic Journal of Applied Psychology, 6*(2), 30-41.
- Mongrain, M., & Anselmo-Matthews, T. (2012). Do positive psychology exercises work? A replication of Seligman et al. (2005). *Journal of Clinical Psychology, 68*(4), 382-389. doi:10.1002/jclp.21839.
- Moraitou, D., & Papantoniou, G. (2012). Mindfulness and action control in young, middle-

- aged, and old adults: An examination of their relationship to attentional bias towards emotional information. *Research in Psychology (Ricerche di Psicologia)*, 2010(4), 591-626.
- Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindness intervention. *Journal of Happiness Studies*, 7, 361-375. doi:10.1007/s10902-005-3650-z.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and wellbeing. *Journal of Social and Clinical Psychology*, 23, 603-619. doi:10.1521/jscp.23.5.603.50748
- Peterson, C. (2006). *A primer in positive psychology*. New York, NY: Oxford University Press.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: APA.
- Pezirkianidis, C., & Stalikas, A. (2018). *PERMA-Profiler: Validation and standardization of a wellbeing instrument in a Greek sample*. Manuscript in preparation. Department of Psychology, Panteion University of Social and Political Sciences, Athens, Greece.
- Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2014). Positive psychology interventions in people aged 50-79 years: Long-term effects of placebo-controlled online interventions on wellbeing and depression. *Aging and Mental Health*, 18(8), 997-1005.
- Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2015). Strengths-based positive psychology interventions: A randomized placebo-controlled online trial on long-term effects for a signature-strengths vs. a lesser strengths intervention. *Frontiers in Psychology*, 6, 456. doi: 10.3389/fpsyg.2015.00456
- Proyer, R. T., Gander, F., Wyss, T., & Ruch, W. (2011). The relation of character strengths to past, present, and future life satisfaction among German-speaking women. *Applied Psychology*, 3, 370-384.
- Schwartz, C., Quaranto, B. R., & Gray, K. (2013). Altruism and health: Theoretical perspectives. In A. Efklides & D. Moraitou (Eds.), *A positive psychology perspective on quality of life* (pp. 107-124). *Social Indicators Research Series*, 51. Dordrecht, Netherlands: Springer.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14. doi:10.1037/0003-066X.55.1.5.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C., (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410-421.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Free Press.
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80, 325-339.
- Sheldon, K. M., & Lyubomirsky, S. (2007). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *Journal of Positive Psychology*, 1(2), 73-82.
- Shimai, S., Otake, K., Utsuki, N., Ikemi, A., & Lyubomirsky, S. (2004). Development of Japanese subjective happiness scale (SHS) and its examination of validity and reliability. *Japanese Journal of Public Health*, 51, 1-9.

- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65*(5), 467-487. doi:10.1002/jclp.20593.
- Σταλίτσας, Α., & Μυτσκίδου, Π. (2011). *Εισαγωγή στη θετική ψυχολογία* [Introduction to positive psychology]. Αθήνα: Τόπος.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*, 320-333.