International Journal of Behavioral Sciences

Original Paper

Positive Education: A Way to Foster and Promote Psychological Flourishing in Schools

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Submitted: 16 March 2020 **Accepted:** 23 April 2020

Int J Behav Sci. 2020; 14(1): 20-26

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Abstract

Introduction: The increasing importance of the movement of positive psychology and consequently positive education has led scientific study to foster and promote human psychological flourishing. This research aimed to provide an educational-interventional protocol to foster and promote flourishing and evaluate its effectiveness.

Method: With a pretest and posttest design and a control group, this study was performed on 34 teachers from two schools in Tehran, selected by multi-stage cluster sampling. After randomly allocating teachers to the test and control groups, they complete the Human Psychological Flourishing Scale and Flourishing Questionnaire. Then, the educational-interventional flourishing protocol was only presented to the test group during 14 sessions. The questionnaires were filled again by all the subjects at the end of the course.

Results: According to the results of the univariate and multivariate covariance analyses, flourishing training significantly increased all the components of flourishing in the test group, compared to the control group.

Conclusion: According to the results, the application of educational-interventional flourishing protocol increased all the components of flourishing among teachers (e.g., positive emotion, relationships, meaning, and accomplishment, sense of satisfaction/happiness, individual competency and social contribution). Therefore, this protocol can be applied to promote the flourishing of teachers.

Keywords: Positive Psychology, Human Flourishing, Educational-interventional Protocol

Introduction

Human flourishing has long been the primary subjects of research in human psychology and has recently attracted the attention of a branch of psychology called positive psychology [1]. Positive psychology studies human optimal functioning; and helps to obtain a better understanding of factors affecting the prosperity and flourishing of individuals and communities [2-4]. Therefore, positive psychology is considered as the science of happiness and human flourishing [5].

Positive education is a new paradigm, which uses positive psychology in educational environments by investing in the potential of schools for education and improvement of wellbeing and flourishing of individuals [6]. Not only the use of positive education in schools has led to significantly satisfactory educational results, but also it has been associated with the growth and formation of proper characteristic, wellbeing and flourishing of all

individuals in the schools [7-10].

Flourishing is a combination of having a good feeling and good performance; it is synonymous with a high level of well-being and optimal mental health [11]. Seligman, the father of positive psychology, proposed five components for flourishing which are termed as PERMA: Positive Emotions, Engagement, Relationships, Meaning in Life, and Accomplishment [7]. Soleimani et al.[12], confirmed four of the five components of Seligman's PERMA model among Iranian university students (PRMA).

Since some scholars believe that components of flourishing are different in various sociocultural textures [13-15], Hojhabrian et al.[16], presented the human psychological flourishing model in the sociocultural context of Iran. According to this model (as shown in Figure 1), the determinants of human flourishing are teleological thinking, flourishing motivation, values/character strength, social-environmental-cultural conditions, positive emotion, positive relationship, personality traits (extraversion, openness conscientiousness) and self-management; combination and interaction of which could lead to flourishing (consisting of sense of satisfaction/happiness, individual competency and social contribution) [16]. Sense of satisfaction/happiness is the first component of flourishing. A flourished person is satisfied with his/her performance and life, has a happy feeling, and loves life. The second component constituting flourishing is individual competency. Competency indicates how people should accomplish their duties or react in a particular situation or behave according to the situation. The third constituent component of flourishing is social contribution. In addition, to individual achievements, a flourished person will constructively involve in the community and endeavors towards the promotion of others' well-being. Such a person can offer important contributions to the community, spend time and energy to help improve the community, and his/her daily activities and actions will lead to fruitful results for the community [12, 17].

In the present research, it was aimed to provide an applicable framework for positive education in Iranian schools based on the Human Psychological Flourishing Model (HPFM) presented by Hojhabrian, et al., in order to nurture and enhance flourishing and assess its effectiveness on teachers. Therefore, this research aimed to investigate the effectiveness of positive education on the flourishing of teachers and its components (three components presented in Hojhabrian, et al.'s research [1, 16]: a sense of satisfaction/happiness, individual competency and social contribution; and components confirmed in Soleimani, et al.'s study [12]: positive emotion, relationships, meaning and accomplishment).

Method

This quasi-experimental and applied research was performed with a pretest-posttest design and a control group. The statistical population included all high school teachers in district 12 of Tehran selected by multistage

cluster sampling method. In this regard, Tehran was at first divided into five geographical districts (north, south, east, west, and center) and a geographical district was randomly selected (the central district). Afterwards, one school (Alavi High School in education region 12 of Tehran) was randomly selected from the schools of this district. In addition, Salman High School was selected as another girl's high school in the same region in order to have matching tests and control groups. Following that, 17 teachers were selected from each school, and a total of 34 teachers were randomly entered into the study as the statistical population. It is notable that the teachers of the test and control groups were selected from different schools (Salman High School and Alavi High School, respectively) to prevent the distribution of experimental practice. The entry criteria included voluntary participation, not being employed at both sample schools, and commitment to attend all training sessions. The exit criteria included unwillingness to continue cooperation or being absent for more than two sessions. Data were collected using two questionnaires and a researchermade educational-interventional protocol, as presented below:

Flourishing Questionnaire (FQ) by Soleimani et al: This 28-item questionnaire has been created by a factor analysis method based on Seligman's PERMA model, and contains acceptable and satisfactory psychometric properties [12]. The reliability of the factors of positive emotion, relationship, meaning, achievement and the whole questionnaire was reported to be satisfactory and desirable at Cronbach's alphas of 0.91, 0.83, 0.88, 0.87 and 0.95, respectively. Moreover, the items are scored based on a six-point Likert scale. The total flourishing score is obtained within the range of 28-168, and the score of each item is in the range of 7-42.

Human Psychological Flourishing Scale (HPFS): This scale has been created based on the domestic flourishing model proposed by Hojabrian et al.[16]. With the application of the factor analysis method, this 12-item scale has acceptable and satisfactory psychometric properties. According to this model, flourishing encompasses three components of sense satisfaction/happiness, individual competency, and social contribution. Results indicated that HPFS contained proper reliability coefficients (Cronbach's alpha), in a way reliability factors that values of satisfaction/happiness, individual competency, social contribution and total questionnaire were favorable and satisfactory at levels of 0.83, 0.77, 0.79 and 0.87, respectively. The items are scored based on a six-point Likert scale. The total flourishing score is within the range of 12-72, and the score of each factor is in the range of 4-24 [1].

Researcher-made **Educational-Interventional Protocol Nurturing** and **Promoting** for Flourishing: This protocol was designed based on the Human Psychological Flourishing Model by Hojabrian et al. proportional to the (HPFM) sociocultural context of Iran (Figure 1)[16]. In order to design the protocol, the available literature and

studies similar domestic and foreign were reviewed, followed by preparing the required workshop training related to each component of the flourishing model using positive psychology teachings. After on, the whole educationalinterventional protocol, including scheduling, implementation method and agenda of meetings were designed. In order to evaluate the content validity of the protocol, the opinions of five positive psychology experts were gathered about the protocol. In the next stage, some necessary modifications were applied in the protocol content based on these opinions, followed by the final confirmation of the protocol. The structure and content of the designed protocol are expressed in Table 1. It is notable that the program was held in the form of 14 three-hour sessions (a total of 42 hours).

After designing the educational-interventional flourishing protocol, 17 teachers were randomly selected from Salman Farsi and Alavi high schools. Following that, teachers of Salman and Alavi high schools were randomly allocated to the test and control groups, respectively. Meetings were held with each group, and pretest was performed after explaining the research design. After performing the pretest, which involved use of FQ by Soleimani et al. and HPFS by Hojhabrian et al., the designed flourishing protocol was implemented only for the test group, and the control group received no education. In addition, attempts were made to match the main form of the flourishing education protocol with the time of teachers in Iranian schools. At the end of the sessions, all subjects filled the flourishing questionnaires (posttest), and results were analyzed to assess the effectiveness of the flourishing program.

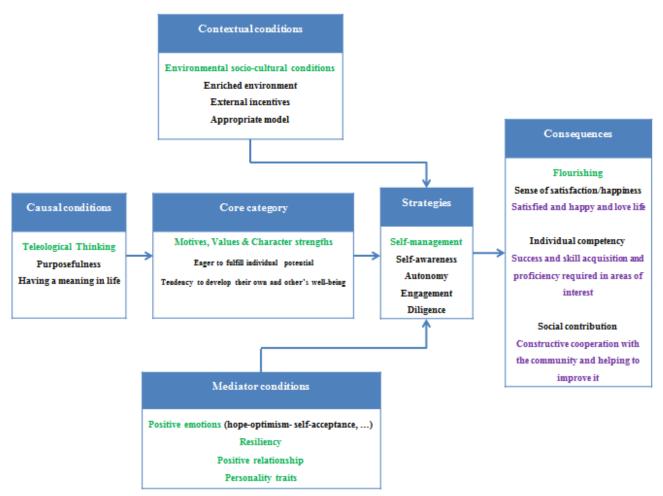


Diagram1. The Human Psychological Flourishing Model in the Sociocultural Context of Iran [16]

Results

In this research, all of the participants in the test and control groups were female and within the age range of 33-57 years. In total, each of the test and control groups were allocated to 17 participants from Salman and Alavi high schools, respectively. In terms of descriptive indicators of groups, mean and standard deviation of age in the test and control groups was

45.58±5.60 years and 46±6.58 years, respectively. At first, the outliers were assessed to prepare data for processing. In this regard, the results were indicative of the presence of no outliers.

Table 2 shows the mean and standard deviation of flourishing components in the test and control groups before and after the implementation of the flourishing protocol.

Table 1. Educational-interventional Protocol for Promoting Flourishing

Session title	Contents
Session 1	Desitive payabology and its uses
introduction to human psychological	 Positive psychology and its uses Human Psychological Flourishing Model [16]
flourishing model (HPFM)	- Human Psychological Flourishing Model [16]
Session 2	- Introducing the sense of meaning in life and methods to achieve it [18-22]
teleological thinking	- Purposefulness and goal determination theory
(Purposiveness, meaning in life)	- Individual idealized vision
Session 3	- Evaluating the character strength of individuals [23]
motives, values, character strengths	- Introducing values-in-action classification of strengths
	- Performing two-person activity of interviewing character strengths
Session 4	- Using the cultural model of addressing [24] to define multiple identities of
	individuals
environmental and sociocultural determinants of flourishing	- Compiling community genogram of individuals based on Ivy pattern [25]
	- Assessing the available opportunities and threats in the environment
Session F	- Filling the PANAS questionnaire [26]
Session 5	- Introducing positive emotions [27]
positive emotions	- Interventions to increase positive emotions [28]
	- Resilience education techniques: 1- searching ABCDEs [20], 2- thinking traps [29],
Session 6	3- putting in perspective [29], 4- loving, kindness, and meditation [30]
resilience	- Finding positive points in harsh and unfortunate conditions [31]
	- High quality connections [32]
Session 7	- Effective listening, effective expressing & active-constructive responding [33]
positive relationship	- Practicing kindness[7], empowerment and Drawing the empowering home tree
	as home assignment [18]
	- Evaluating personality traits of individuals using NEO-FFI [34]
Session 8	- personality traits affecting the flourishing of individuals (extroversion, openness,
personality traits	Conscientiousness)
	- Positive character [7]
Session 9	- Self-management techniques [35]
self-management and self-awareness	- Self-awareness skill [36]
Session 10	- engagement and flowing in an activity [37]
engagement and diligence	- Interventions to increase engagement in an activity [38]
Session 11	- Methods to increase the sense of satisfaction and happiness [7, 39]
sense of satisfaction/ happiness	- Performing the CASIO practice [40]
Session 12	- Paths and techniques to obtain achievement/competency [7, 9]
individual competency	- Methods to effectively appreciate and award successful individuals [41]
	- Social responsibility and Altruism
Session 13	- Empathy skills and explaining feel-good, do-good phenomenon [42]
social contribution	- Practicing leisure with charity [43]
	Gifting time to others [7]
Cossion 14	- Review of the contents of previous sessions
Session 14 conclusion	- Designing individual development plan in order to preserve and learn the
COLICIOSION	trained skills

Furthermore, the multivariate covariance analysis (MANOVA) was applied to evaluate the effect of educational-interventional flourishing protocol on flourishing components, including positive emotion, positive relationships, meaning, and achievement, sense of satisfaction/happiness, individual competency, and social contribution of teachers. One of the assumptions of this test is uniformity of covariance matrix, assessment of which was carried out applying the Box M test. Results of the mentioned test indicated the lack of adherence to uniformity of assumption of the covariance matrix (P<0.05). Therefore, Pillai's trace was regarded as the multivariate index for reporting according to the recommendation by Tabachnick and Fidell [44]. In addition, the uniformity of the assumption of variance of error was confirmed using the Leven test (P>0.05). On the other hand, a significant correlation was found between the dependent variables of the research applying the Bartlett test.

Moreover, interaction F-value was estimated between the covariance and dependent variables separately for each dependent variable to evaluate the homogeneity of regression slope. The results confirmed the establishment of the assumption, demonstrating that P-value was greater than 0.05 in all cases (P>0.05). Furthermore, the linear correlation between covariance and dependent variables was assessed applying the Pearson's correlation test. In this respect, the range of correlations was 0.50-0.79 and significant at P<0.01, thereby showing a significant linear association between the covariance and dependent variables.

After the evaluation of assumptions, MANOVA was applied to assess group differences in linear composition of dependent variables. As presented in Table 3, results of Pillai's trace indicated a significant difference between the dependent variables of the test and control groups, where 30-40% of flourishing changes in the subjects was determined by the educational-interventional flourishing

protocol. On the other hand, the univariate covariance analysis was applied to determine which dependent variables in the test and control groups have a significant difference. As shown in Table 4, after removing the pretest effect, results of posttest showed a significant difference between the study groups in all of the evaluated variables. This difference demonstrated the great improvement of flourishing in the test group after training, compared to the control group. Ultimately, these results were indicative of the effectiveness of training on the flourishing of high school teachers.

Discussion

According to the results of the present study, flourishing improved in teachers using positive psychology teachings and positive education. In this regard, the findings of this study are congruent with other studies [45, 46].

Positive education improved all flourishing components, including positive emotion, positive relations, meaning, and achievement based on Soleimani's FQ and sense of satisfaction and happiness, individual competency and social contribution based on Hojhabrian's scale, in the present research. According to findings, positive education of flourishing improved the sense of meaning in the test group. Various studies have demonstrated that individuals who have goals in their lives have a longer lifespan, are more satisfied with life, and experience fewer health problems [47].

In addition, those who consider a positive ending for their problems experience better mental wellbeing [48]. Furthermore, they find meaning for themselves after negative life events, and have the ability to reach a positive level of daily functions [49]. It was also found that positive training of flourishing increased positive emotion in the test group. In general, improvement of positive emotions could lead to significant social, psychological, physical and intelligence benefits for individuals [50]. In addition, positive emotions can predict longer lifespan [51-53] and eliminate the effects of negative emotions [54], thereby increasing the resilience of individuals [55]. People who experienced positive emotions had a higher level of thinking and mental abilities, compared to those who experienced negative events, since negative emotions restrict momentary thinking-practice range in individuals [27].

Moreover, results of the present study demonstrated that positive education of flourishing improved the relationships in the test group. Generally, good relationships are essential for wellbeing and might be associated with increased happiness and more efficient performance. Individuals with good relationships deeply care for other people [56]. Diener et al. [57], marked that proper social relations predicted the mental wellbeing of individuals in all of the evaluated countries, and it may be the most important source of personal wellbeing. It could be concluded that proper relationship is the most efficient predictor of satisfaction with life. In the present research, achievement/accomplishment of the subjects improved after positive training of flourishing. Competent individuals have determination and courage. Not only they finish what they have started, but they also have

determination and resilience in achieving long-term goals. Determination prepares these people to deal with difficulties in life. In addition, those with specific goals, determination and commitment more efficiently perform their jobs, compared to individuals without a specific goal, determination or commitment [58].

Analysis of the data obtained from Hojhabrian's scale demonstrated that positive education of flourishing increased sense of satisfaction and happiness in teachers. Satisfaction with life is defined as positive-emotional assessment of life [57]. This term is indicative of an extended evaluation of one's life performed by the person. In addition, it can show the judgment of the individual about all aspects of life at a certain point in time or integrated judgment about the person's life since birth [59]. Happiness is also defined by Seligman as involvement in positive emotions, commitment to life and having meaning in life [20]. According to Lyubomirsky et al., happiness is the sense of joy and good feeling and living a meaningful and valuable life [60]. Happy individuals are mostly healthy and optimistic and are happy with their existence. They also consider life to be valuable and live in peace and understanding [61, 62].

Positive education of flourishing plays a role in the improvement of individual competency in teachers. Competency shows how a person must perform his duties, react toward a specific situation, and behave in general [63]. Therefore, competent individuals can properly perform their responsibilities, have great skills and competencies, use the available opportunities to demonstrate their capabilities and dominate the important activity areas [7, 11, 13, 64]. Positive education of flourishing enhanced positive performance and also the social contribution of teachers. In other words, a not flourished person only has individual accomplishments, but also constructively participates in social affairs and contributes in order to increase the wellbeing of others.

In addition, these type of people can make significant contributions to the society, spend time and energy to improve the community, perform daily activities and have valuable results for other people [64]. In addition to the mentioned statistical evidences regarding the effectiveness of educational-interventional flourishing protocol, non-statistical evidence has been obtained in terms of the positive effect of holding flourishing training workshops. After the implementation of the training workshop in the test school, the program was held in many other schools of Tehran when requested by their managers.

Conclusion

Positive education of flourishing based on the educational-interventional protocol increased the flourishing of individuals. Compared to similar studies, one of the major advantages of the current research is that in addition to the integration of approaches to human flourishing (e.g., sense of satisfaction, proper performance and social wellbeing), it presented the process of flourishing based on effective, predisposing, facilitating or interfering factors. The components of

flourishing in humans separately for each factor, explained the educational workshop proportional to each factor step by step.

In the current research, the effect of the educationalinterventional flourishing protocol was assessed on teachers. Therefore, it is recommended that the effectiveness of this process be evaluated on other samples, including high school and university students, employees and common people, and in psychological interventions in order to improve flourishing in future studies. In addition, a pretest-posttest design and a control group were used in the present study, where the control group received no type of intervention. As such, the effectiveness of this method can be compared to other techniques in future studies and follow-ups can be used to determine the long-term effectiveness of this method. In conclusion, use of positive psychology, especially education of flourishing based on the educational-interventional flourishing protocol, can improve flourishing in teachers. Therefore, this protocol can be applied to enhance flourishing in these individuals.

Acknowledgement

Hereby, the authors extend their gratitude to the teachers, as well as managers and other authorities of Salman and Alavi high schools in district 12 of Tehran for their cooperation with the research.

References

- 1. Hojabrian H, Rezaei AM, Bigdeli I, Najafi M, Mohammadifar MA. Construction and Validation of the Human Psychological Flourishing Scale (HPFS) in sociocultural context of Iran. Practice in Clinical Psychology. 2018;6(2):129-39.
- 2. Seligman ME, Rashid T, Parks AC. Positive psychotherapy. American psychologist. 2006;61(8):774.
- 3. Gable SL, Haidt J. What (and why) is positive psychology? Review of general psychology. 2005;9(2):103-10.
- 4. Khodayarifard M, Ghobari-Bonab B, Akbari-Zardkhaneh S, Zandi S, Zamanpour E, Derakhshan M. Positive psychology from Islamic perspective. International Journal of Behavioral Sciences. 2016;10(1):77-83.
- 5. Compton WC, Hoffman E. Positive psychology: The science of happiness and flourishing: SAGE Publications; 2019.
- 6. Oades LG, Robinson P, Green S. Positive education: Creating flourishing students, staff and schools. InPsych: The Bulletin of the Australian Psychological Society Ltd. 2011;33(2):16.
- 7. Seligman M. Flourish: a visionary new understanding of happiness and well-being. Policy. 2011;27(3):60-1.
- 8. Norrish JM, Williams P, O'Connor M, Robinson J. An applied framework for positive education. International Journal of Wellbeing. 2013;3(2).
- 9. Yeo S-E. Resilience, Character Strengths and Flourishing: A Positive Education Workshop for Singapore Teachers. 2011.
- 10. White MA. Positive education at Geelong grammar school. Oxford Handbook of Happiness2013.
- 11. Keyes CL. Mental illness and/or mental health? Investigating axioms of the complete state model of health. Journal of consulting and clinical psychology. 2005;73(3):539.
- 12. Soleimani S, Rezaei AM, Kianersi F, Hojabrian H, Khalili Paji K. Developement and validation of flourishing questionnaire based on seligman's model among Iranian university students. Journal of Research and Health. 2015;5(1):3-12.
- 13. Huppert FA, So TT. Flourishing across Europe: Application of a new conceptual framework for defining well-being. Social indicators research. 2013;110(3):837-61.
- 14. Gokcen N, Hefferon K, Attree E. University students' constructions of flourishing in British higher education: An inductive content analysis. International Journal of Wellbeing. 2012;2(1).
- 15. Lopez SJ, Magyar-Moe JL, Petersen SE, Ryder JA, Krieshok TS, O'Byrne KK, et al. Counseling psychology's focus on positive aspects of human functioning. The Counseling Psychologist. 2006;34(2):205-27.

- 16. Hojabrian H, Bigdeli I, Najafi M, Rezaei A. providing the psychological model of human flourishing based on the grounded theory: A qualitative research. Educational Psychology. 2015;10(34):207-32.
- 17. Hekmati I, Vahedi S, Babapour J. Explanatory and Confirmatory Factors Analysis of Social Well-being Questionnaire. International Journal of Behavioral Sciences. 2014;8(1):11-9.
- 18. Rashid T, Lopez S. Positive psychology: Exploring the best in people. Westport: Praeger Publishers; 2008.
- 19. Frankl VE. Man's search for meaning: Simon and Schuster; 1985.
- 20. Seligman ME. Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment: Simon and Schuster; 2004.
- 21. Steger M, Wong P. The human quest for meaning: Theories, research, and applications. 2012.
- 22. Locke EA. Motivation through conscious goal setting. Applied and preventive psychology. 1996;5(2):117-24.
- 23. Peterson C, Seligman ME. Character Strengths and Virtues: A Handbook and Classification (New York: American Psychological Association & Oxford University Press, 2004). Reflective Practice: Formation and Supervision in Ministry. 2012;32.
- 24. Hays PA. Addressing cultural complexities in practice: A framework for clinicians and counselors: American Psychological Association; 2001.
- 25. Ivey AE, Ivey MB, Zalaquett CP. Intentional interviewing and counseling: Facilitating client development in a multicultural society: Nelson Education; 2013.
- 26. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: the PANAS scales. Journal of personality and social psychology. 1988;54(6):1063.
- 27. Fredrickson BL. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. American psychologist. 2001;56(3):218.
- 28. Fredrickson BL, Losada MF. Positive affect and the complex dynamics of human flourishing. American psychologist. 2005;60(7):678.
- 29. Reivich K, Shatté A. The resilience factor: 7 essential skills for overcoming life's inevitable obstacles: Broadway Books; 2002.
- 30. Fredrickson BL, Cohn MA, Coffey KA, Pek J, Finkel SM. Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. Journal of personality and social psychology. 2008;95(5):1045.
- 31. King LA, Miner KN. Writing about the perceived benefits of traumatic events: Implications for physical health. Personality and social psychology bulletin. 2000;26(2):220-30.
- 32. Stephens JP, Heaphy E, Dutton JE. High quality connections. The Oxford handbook of positive organizational scholarship. 2012:385-99.
- 33. Gable SL, Reis HT, Impett EA, Asher ER. What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. Journal of personality and social psychology. 2004;87(2):228.
- 34. Costa PT, MacCrae RR. Revised NEO personality inventory (NEO PI-R) and NEO five-factor inventory (NEO-FFI): Professional manual: Psychological Assessment Resources, Incorporated; 1992.
- 35. Lorig KR, Holman HR. Self-management education: history, definition, outcomes, and mechanisms. Annals of behavioral medicine. 2003;26(1):1-
- 36. Burnard P. Effective communication skills for health professionals: Nelson Thornes; 1997.
- 37. Shernoff DJ, Csikszentmihalyi M. Cultivating engaged learners and optimal learning environments. Handbook of positive psychology in schools. 2009:131-45.
- 38. Bundick MJ, Quaglia RJ, Corso MJ, Haywood DE. Promoting Student Engagement in the Classroom. Teachers College Record. 2014;116(4):n4.
- 39. Seligman ME, Steen TA, Park N, Peterson C. Positive psychology progress: empirical validation of interventions. American psychologist. 2005;60(5):410.
- 40. Frisch MB. Quality of life therapy: Applying a life satisfaction approach to positive psychology and cognitive therapy: John Wiley & Sons; 2005.
- 41. Dweck C. Mindset: The new psychology of success Random House. New York, NY. 2006.
- 42. Salovey P, Mayer JD, Rosenhan DL. Mood and helping: Mood as a motivator of helping and helping as a regulator of mood. 1991.
- 43. Peterson C. A primer in positive psychology: Oxford University Press; 2006.
- 44. Tabachnick BG, Fidell LS, Ullman JB. Using multivariate statistics: Pearson Boston, MA; 2007.
- 45. Feicht T, Wittmann M, Jose G, Mock A, Von Hirschhausen E, Esch T. Evaluation of a seven-week web-based happiness training to improve psychological well-being, reduce stress, and enhance mindfulness and flourishing: a randomized controlled occupational health study. Evidence-Based Complementary and Alternative Medicine. 2013;2013.
- 46. Barber LK, Bagsby PG, Munz DC. Affect regulation strategies for promoting (or preventing) flourishing emotional health. Personality and

- Individual Differences. 2010;49(6):663-6.
- 47. McKnight PE, Kashdan TB. Purpose in life as a system that creates and sustains health and well-being: An integrative, testable theory. Review of General Psychology. 2009;13(3):242-51.
- 48. Pals JL. Narrative identity processing of difficult life experiences: Pathways of personality development and positive self-transformation in adulthood. Journal of personality. 2006;74(4):1079-110.
- 49. King LA, Hicks JA, Krull JL, Del Gaiso AK. Positive affect and the experience of meaning in life. Journal of personality and social psychology. 2006;90(1):179.
- 50. Fredrickson BL, Tugade MM, Waugh CE, Larkin GR. What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. Journal of personality and social psychology. 2003;84(2):365.
- 51. Danner DD, Snowdon DA, Friesen WV. Positive emotions in early life and longevity: findings from the nun study. Journal of personality and social psychology. 2001;80(5):804.
- 52. Levy BR, Slade MD, Kunkel SR, Kasl SV. Longevity increased by positive self-perceptions of aging. Journal of personality and social psychology. 2002;83(2):261.
- 53. Xu J, Roberts RE. The power of positive emotions: It's a matter of life or death—Subjective well-being and longevity over 28 years in a general population. Health Psychology. 2010;29(1):9.
- 54. Garland EL, Fredrickson B, Kring AM, Johnson DP, Meyer PS, Penn DL. Upward spirals of positive emotions counter downward spirals of negativity: Insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in

- psychopathology. Clinical psychology review. 2010;30(7):849-64.
- 55. Tugade MM, Fredrickson BL. Resilient individuals use positive emotions to bounce back from negative emotional experiences. Journal of personality and social psychology. 2004;86(2):320.
- 56. Diener E, Biswas-Diener R. Happiness: Unlocking the mysteries of psychological wealth: John Wiley & Sons; 2011.
- 57. Diener E, Oishi S, Lucas RE. Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. Annual review of psychology. 2003;54(1):403-25.
- 58. Barrick MR, Mount MK. The big five personality dimensions and job performance: a meta- analysis. Personnel psychology. 1991;44(1):1-26.
- 59. Myers DG. The funds, friends, and faith of happy people. American psychologist. 2000;55(1):56.
- 60. Lyubomirsky S, Sheldon KM, Schkade D. Pursuing happiness: The architecture of sustainable change. Review of general psychology. 2005;9(2):111-31.
- 61. Andersson P. Happiness and health: Well-being among the self-employed. The Journal of Socio-Economics. 2008;37(1):213-36.
- 62. Cohn MA, Fredrickson BL, Brown SL, Mikels JA, Conway AM. Happiness unpacked: positive emotions increase life satisfaction by building resilience. Emotion. 2009;9(3):361.
- 63. Lawler III EE. Performance management: The next generation. Compensation & Benefits Review. 1994;26(3):16-9.
- 64. Diener E, Wirtz D, Tov W, Kim-Prieto C, Choi D-w, Oishi S, et al. New well-being measures: Short scales to assess flourishing and positive and negative feelings. Social Indicators Research. 2010;97(2):143-56.