การศึกษาความเป็นไปได้ของโปรแกรมเสริมสร้างความสุขและความเข้มแข็งทางใจโดยใช้ครอบครัวเป็นฐานต่ออาการซึมเศร้าในวัยรุ่น

Feasibility of Enhancing Happiness and Resilience Family-Based Program on Depressive Symptoms among Adolescents

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บทคัดย่อ

การศึกษานำร่องครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความเป็นไปได้ของโปรแกรมเสริมสร้างความสุขและความเข้มแข็งทางใจโดยใช้ครอบครัวเป็นฐานต่ออาการซึมเศร้าในวัยรุ่น กลุ่มตัวอย่างคัดเลือกแบบเจาะจง เป็นนักเรียนวัยรุ่นที่มีอาการซึมเศร้าเล็กน้อยถึงปานกลางที่กำลังศึกษาอยู่ในชั้นมัธยมศึกษาตอนปลาย ชั้นปีที่ 4-6 ในโรงเรียนมัธยมแห่งหนึ่ง จังหวัดกาฬสินธุ์ จำนวน 10 คน เครื่องมือวิจัย ได้แก่ แบบสอบถามข้อมูลทั่วไป แบบวัดอาการซึมเศร้า โปรแกรมเสริมสร้างความสุขฯ และแบบประเมินผลการเข้าร่วมโปรแกรม กลุ่มตัวอย่างและสมาชิกครอบครัวเข้าร่วมโปรแกรม เป็นระยะเวลา 4 สัปดาห์ๆ ละ 1 ครั้งๆ ละ 45-60 นาที วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนาและสถิตินอนพาราเมตริก ผลการศึกษาพบว่า หลังการเข้าร่วมโปรแกรม กลุ่มตัวอย่างมีค่าเฉลี่ยคะแนนอาการซึมเศร้าลดลงกว่าก่อนเข้าร่วมโปรแกรมอย่างมีนัยสำคัญทางสถิติที่ .05 กลุ่มตัวอย่างและสมาชิกครอบครัวส่วนใหญ่มีความพึงพอใจในเนื้อหาและกิจกรรมของโปรแกรม ผลการศึกษาแสดงให้เห็นว่าโปรแกรมเสริมสร้างความสุขและความเข้มแข็งทางใจโดยใช้ครอบครัวเป็นฐานมีความเป็นไปได้ในการนำมาประยุกต์ใช้เพื่อลดอาการซึมเศร้าในวัยรุ่นได้ ดังนั้นควรส่งเสริมให้พยาบาลจิตเวชนำโปรแกรมนี้ไปใช้ในการลดอาการซึมเศร้าในนักเรียนวัยรุ่น และควรมีการศึกษาวิจัยโดยใช้รูปแบบการทดลองที่มีการสุ่มและการควบคุมอย่างเคร่งครัดต่อไป

คำสำคัญ: ความสุข ความเข้มแข็งทางใจ โปรแกรมที่ใช้ครอบครัวเป็นฐาน อาการซึมเศร้า วัยรุ่น

Abstract

This pilot study examined the feasibility of implementing the Enhancing Happiness and Resilience Family-Based program. Purposive sampling was used to recruit 10 high-school adolescents with mild to moderate depressive symptoms in Kalasin Province, Northeastern, Thailand. Four measures were used to collect data including a demographic data record form, a Thai version of the Center for Epidemiologic Studies Depression Scale, The enhancing happiness and resilience family-based program, and a program evaluation questionnaire. The participants and family members participated in a weekly program for four weeks, 45-60

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minutes per week. Descriptive statistics and a nonparametric test were used to analyze the data. Initial results of the pilot study showed that after completing the Enhancing Happiness and Resilience Family-Based program, participants had significantly decreased depressive symptoms. The participants and family members were satisfied with the program's content and activities. The feasibility of implementing this program to reduce depressive symptoms among adolescents has been supported. Research beyond the pilot study is needed to examine the program under more controlled conditions. It is anticipated that psychiatric-mental health nurses will be able to implement the program for high-school students after further testing.

Keywords: Happiness, Resilience, Family Based Program, Depressive symptoms, Adolescents

Introduction

Depression has a high prevalence rate worldwide.[1] Its onset occurs most frequently in adolescence, especially between the ages of 15 to 18 years,[2] and creates a large cause of disease burden for this age group.[1] In USA, the prevalence of major depressive episode among adolescents increased from 8.7% in 2005 to 11.3% in 2014.[3] In Japan, the prevalence of depressive symptoms among Japanese high school students in 2016 was 24.9%[4] and between 19%–30% for Thai high school adolescents.[5] An episode of depression during this early age period increases the risk of subsequent depressive episodes in adulthood.[6]

Depression affects all dimensions of adolescents, including physical, psychological, and social. Adolescents may have loss of energy, feelings of tiredness, disturbances in sleep and appetite, and somatic complaints.[7-8] Most factors that influence adolescent depression are based on negative thoughts of self-views.[9] They may suffer from feelings of sadness, guilt, low self-worth/esteem, loneliness, despair, loss of interest, inability to experience pleasure, irritability, mood swings, and poor resilience.[10] Moreover, poor resilience among adolescents can induce interpersonal relationship problems, low problem-solving skills, and a lack of life's goal.[11] Adolescents may withdraw or isolate themselves from family and peers.[9] Depression may impair an adolescent's ability to function at school or cope with daily life. They may have academic problems, school dropout, substance abuse, high-risk sexual behavior, and an increased risk for suicide.[12,35] Another important factor that influences depressive symptoms among adolescents is family discord.[13] Evidence supports that adolescent depressive symptoms are associated with difficult family relationships and can predict poor communication with parents over time.[14] Family relationships and parenting styles have been shown to be significantly correlated with depressive symptoms.[15] Negative parenting styles, such as overprotection, excessive over-control and expectations, insecure parental attachments, or neglect have also been associated with depressive symptoms. An empirical study in Thailand reported that 10.2% of Thai's parenting tyle was authoritarian. This significantly correlated with depression among the Thai high school adolescents.[16]

Happiness is a positive emotional state or a feeling of pleasure that is subjectively defined by each person.[17,18] Happiness may increase good feelings, energy, self-esteem, positive self-views, optimistic, strength, and resilience.[10] Resilience is defined as positive adaptation in the face of risk or adversity.[19] Resilience may increase adolescents' strength to confront the problem in daily life and provide energy to reach life's goal.[10] There is evidence to

support the association between happiness and resilience. Happiness was found to positively predict resilience among Filipino high school students.[20] In addition, resilience could reduce depressive symptoms and preventing its progression.[21] Therefore, the benefit from happiness, resilience, and the connection between happiness and resilience based on positive psychology may be useful for adolescents who have depressive symptoms. Previous studies for reducing depressive symptoms among adolescents in Thailand, focused on cognitive behavioral therapy and school-based programs. Although the cognitive behavioral therapy (CBT) is the most effective.[22] However, there are limitations such as its difficult to access, and high cost.[23] In addition, adolescents who receive CBT, resulting depressive symptoms may decrease. However, when they returned homes and live with their families, they might confront with risk factors which may induce and increase depressive symptoms again. Regarding in this point, the root of cause of depressive symptoms is family factors. Therefore, reducing depressive symptoms should also focus on family factors. As described above, nursing interventions should focus on how to modify adolescents' negative thoughts of self-views and increase their positive emotions, happiness, and resilience with family based approach. No nursing research was found in the literature to reduce depressive symptoms among adolescents by targeting happiness and resilience from the focus of the family. Thus, the Enhancing Happiness and Resilience Family-Based (EN-HRF) program was developed and tested for feasibility in this pilot study. The results from this pilot study may be useful to psychiatric nurses whose clinical practice is with adolescents with depressive symptoms.

Conceptual Framework: Based on an integrated framework of positive psychology, family system theory, and research evidence. Positive psychology seeks evidence for how humans can increase happiness, fulfillment, flourishing and resilience.[24] Outcomes of studies should provide guidance for people to feel good, happy, strong, resilient, and optimistic. Positive psychology gives importance to selecting and focusing on a goal, using positive emotions, and strategizing how to change and maintain positive change.[10] Adolescents with depressive symptoms may be characterized by the lack of positive affect, engagement, and meaning in life. Depressive symptoms among adolescents, therefore, can be reduced by enhancing happiness, using positive emotions, creating strong character, and helping to find meaning in life.[25] Family system theory provides an understanding of adolescents as part of a larger family system. In the family system, there are subsystems of adolescents, parents, and siblings. As part of the dynamics in family systems, there is the concept of reciprocal determinism.[26] Family interactions, especially with adolescents, are persistently ongoing.[27] A family system member can be helped or harmed by the system. The EN-HRF program has the purpose to increase happiness and resilience among adolescents and reduce depressive symptoms. The program aims to reduce the impact of negative emotions, increase positive emotions, stimulate engagement, and assist with finding meaning in their lives. When adolescents achieve happiness, they will have good feelings; a sense of perceived pleasure; positive thoughts of self-views and optimism; and positive relationships with family. In addition, they will learn to cope with their problems and have a life's goal. These consequences lead them to have strength, resilience, and depressive symptoms may decrease.[27,10,28] The EN-HRF program consists of six stages. The conceptual framework is presented in Figure 1.

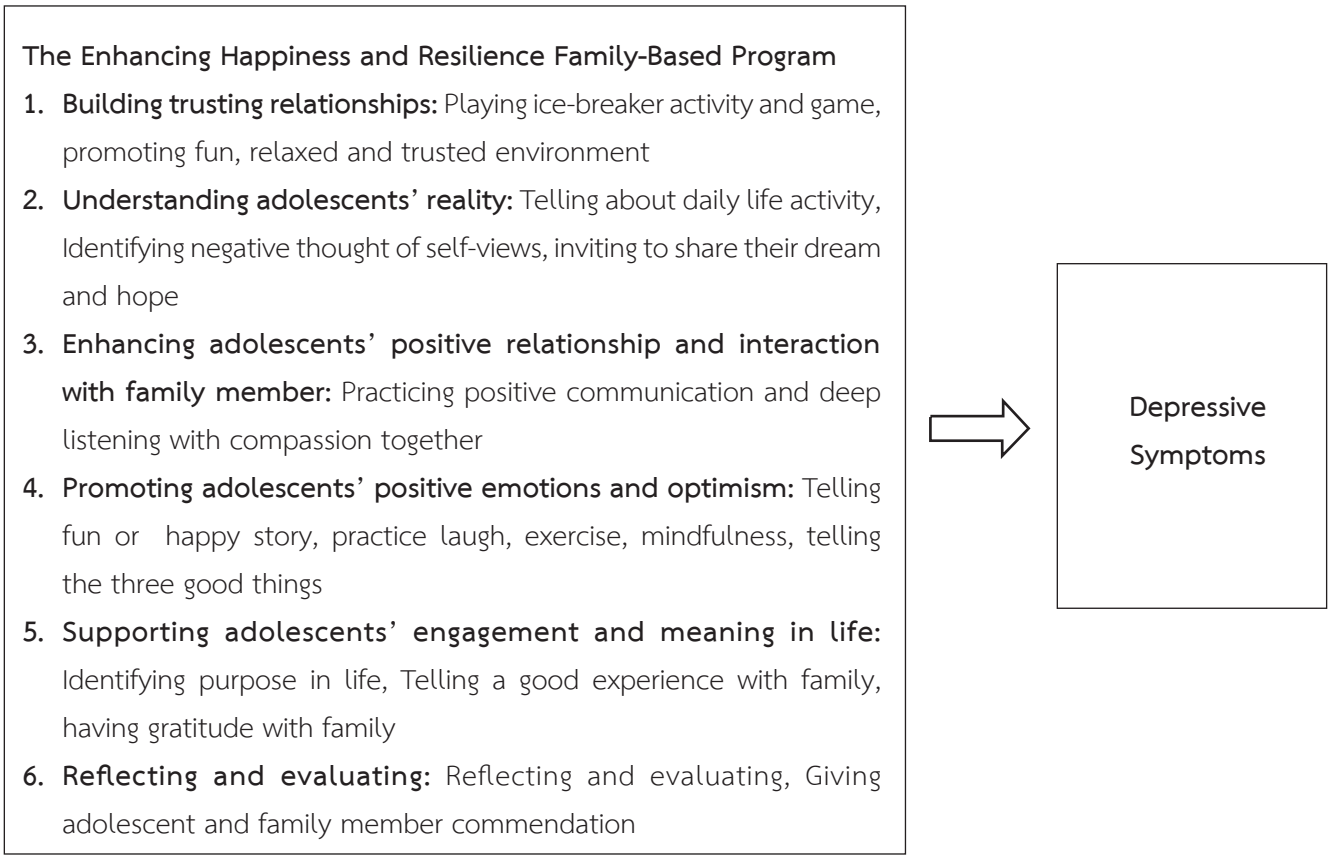

Figure 1-1 Conceptual Framework of the Enhancing Happiness and Resilience Family- Based Program

Methods: The pilot study used a quasi-experimental, one-group, pretest- posttest design.

Population and sample: High school students who had mild to moderate depressive symptoms at a public high school in Kalasin Province. Purposive sampling was used to recruit participants with the following inclusion criteria: (a) age 15–18 years old, (b) in grade 10–12, (c) mild to moderate depressive symptoms with scores of 16–24 on the Thai-CES-D, (d) no past or current history of a diagnosed mental disorder, (e) living with family, (f) one of parents or family member willing to participate in the study, and (g) communicating in Thai language. However, adolescents with evidence of increased depressive symptoms or severe or major depressive disorder were excluded from the study.

Instruments: Four instruments were used: 1. The demographic data record form 2. The Thai version of the 20-item Center for Epidemiologic Studies Depression Scale (Thai-CES-D). The instrument's Cronbach's alpha was.86. The participants were asked to rate the past week's experiences with depressive symptoms on a 4-point rating scale 0–3, ranging from "rarely or none of the time" to "most or all of the time." The scores was the sum of the weights for the 20 items. The possible range of scores for the scale was 0–60. The following cut-off scores best approximate the severity stages of depression: 0–15 = none or minimal, 16–24 = mild to moderate, and > 24 = high to severe.[29] 3. The EN-HRF program: The content and activities of the EN-HRF program were reviewed and critiqued by three experts: one psychiatrist and two professors of psychiatric-mental health nursing. All of them gave their approval to the EN-HRF program. The EN-HRF program was conducted over four weeks with one session each week. The first session was held at the public high school. The fourth or last session was held at the adolescent's home.

Each session took about 45–60 minutes. The following describes the details of each of the six stages (Figure 1):

Stage 1: Building trusting relationships. The primary researcher introduced the research team, described the program's objectives and outline. The adolescents and family members were encouraged to participate together in an ice-breaker activity and game. The researcher promoted fun, relaxed and trusted environment.

Stage 2: Understanding adolescent's reality. The intervention consisted of an assessment of family attachment, relationships, communications, and understanding the adolescent's depressive symptoms, listening to the adolescent's daily life activities, and Identifying negative thought of self-views, inviting the adolescents to express what dreams were had or to share what hopes were in the future. The researcher wrote a genogram describing family attachments, relationships, and communication patterns between the adolescents, family members, and environment. The researcher provided the family with information on adolescent depressive symptoms.

Stage 3: Enhancing adolescents' positive relationship and interaction with family members. The researcher promoted positive communication between adolescents and family members. They were encouraged to practice positive communication and deep listening with compassion together. They also received praise from the researcher and each other.

Stage 4: Promoting adolescents' positive emotions and optimism. The researcher promoted adolescents and family members to play games, tell fun stories, practice laughing, promote exercise, practice mindfulness, tell three good things that had happened in the course of the day or week.

Stage 5: Supporting adolescents' engagement and meaning in life. The researcher encouraged the adolescents and family members to identify the purpose in life, remember a good experience shared with the family, show gratitude to family and others, and plan to do creative and rewarding things with the family. The researcher also encouraged the adolescents to be engaged in their studies, friends, and teacher.

Stage 6: Reflecting and evaluating. The researcher invited the adolescents and family members to reflect, evaluate, and summarize the activities of the EN-HRF program. The researcher praised the adolescents and family members for their participation and achievement with the program.

4. An evaluation questionnaire: There are 3 main items: the appropriateness of the content and activities in the EN-HRF program, time period of the activities in the program, and level of satisfaction with the program.

Protection of human participants: Approval to conduct the study was granted by the Institutional Review Board Graduate Studies, Faculty of Nursing, Burapha University (IRB #08-10-2559). Permission to collect data was obtained from the director of the public high school in Kalasin Province. All potential participants and their parents or legal guardians were informed about the study: objectives, intervention program, and confidentiality, potential risks and benefits. They also were told about what their voluntary participation entailed. They could withdraw at any time without repercussions. Adolescents were asked to sign an assent form. The parents or family members who participated the study were asked to sign a consent form.

Data collection procedures: After formal approvals and with consents/assents signed, data collection commenced. Participants completed the demographic data record form and the Thai-CES-D as a pretest. The researcher selected [10] adolescents who met the inclusion criteria and invited one of their

family members to participate in the program. Then, they received the EN-HRF program that consisted of four sessions (four weeks). Session 1 was conducted at the public high school. Sessions 2, 3, and 4 were conducted at the adolescents' homes. The process of intervention for every session included six stages. Each session took about 40-60 minutes. After completion of the program at the fourth week, the adolescents completed the Thai CES-D as a post-test and evaluation questionnaire.

Data analysis: Descriptive statistics were used to describe the characteristics of the participants and family members. A nonparametric statistical tests were used because of the small sample size. The post hoc Wilcoxon signed-rank test examined for differences in treatment between paired time periods.

Results: Ten adolescents consented to participate in the pilot study and met inclusion criteria. All of them completed four sessions of the EN-HRF program and took the post-test measure. The mean age was 16.8 years (SD = .78). The majority (80.0%) was female with a grade point average of 3.70. All were Buddhist (100%). Half (50%) of them had more than five family members who lived together, were the first child of the family (50%), and had a family income between 10,001 and 15,000 Thai baht/month (50%). Forty percent had two siblings. Ten family members participated in the pilot study. The family members were a mean age of 50.4 years (SD = 2.73). Forty percent were mothers. Half (50%) had graduated from high school. Half (50%) were farmers. All were Buddhist (100%). More than half (60%) indicated there was no present illness.

Depressive symptoms scores: Table 1 shows the increasing values of the mean scores of the Thai CES-D at pre-intervention and post-intervention. Post hoc analyses using Wilcoxon signed rank test indicated that the mean depressive symptoms scores at post-intervention were statistically lower than at pre-intervention.

Table 1 Post Hoc Comparisons of the Thai CES-D Scores Pre- and Post-intervention and Within-Group Difference Using the Wilcoxon Signed Rank Test.

	N	Mean	SD	Wilcoxon
Pre-intervention	10	18.9	2.80	χ^2 = -2.82, p = .005
Post-intervention	10	12.9	3.07	

Feasibility of the program was evaluated by retention of participants and the problems of its implementation. During four weeks of program implementation, none of the adolescents or family members withdrew. All participants suggested that the length of the program should be extended to six weeks. The problems identified with program implementation such as the purpose in life activity, the researcher noticed that most of the adolescents took too much time thinking about the activity. It was difficult for them to go through the mental process and relate a story to a purpose in their life. The researcher adjusted this activity by encouraging the participants to draw a picture about their purpose in life. After that, most of them said, "they liked this approach because the drawing helped them to get a clear picture of their purpose in life". Thus, future interventions should take this approach. For the setting to conduct the program, the participants suggested that it is appropriate to do at their home.

It was convenient for the parents or family members since some parents or family members needed to be at home to work at the grocery store or food restaurant next to the home. Also, some parents were older adults and had an illness, such as diabetes mellitus, chronic renal failure, or heart disease. Thus, the venue of the program should be considered as the convenience of the participants, such as sessions should conducted at the adolescent's home.

Acceptance of the program was determined by participants' ratings on the EN-HRF program evaluation questionnaire and by participants' comments. All participants indicated their acceptance and satisfaction with the EN-HRF program. They enjoyed how they practiced positive communication and deep listening with compassion activities. One participant said, "I like this practice because I could tell everything that I wanted to tell to my mom, and my mom listened to me more." Similarity, one of family members said, "This is a very good activity that helped me to know the problems of my son that I had never known before."

Discussion: Findings showed that the pilot EN-HRF program was not only feasible but effective. All participants had lower depressive symptoms. It is surmised that the negative emotions of adolescents are modified to positive emotions by the program's activities, as well as the negative thoughts of self-views and behaviors. The program's initial focus is on building a trusting relationship between adolescents, family members, and researcher team. Encouraging participants to play an ice-breaker activity is useful. Success can be informally assessed when the adolescents and family members are seen to have fun, be amused, laugh, and are relaxed and happy. At that point, the trusting relationships between adolescents, family members, and researcher team emerged. The practice of deep listening with compassion provides participants the opportunity to express their thoughts and emotions. It gives a chance for the family to know each other's problems that they might not know. This allows understanding and empathy between adolescents and family members to unfold.[30] Additionally, the activity of inviting participants to share their dreams and hopes supports adolescents to feel hopeful, inspired, and motivated. They learn that they can find and follow a way to so their dream will come true. Adolescents see and hear the positive verbal and non-verbal expressions from family members, supporting them to have hope and reach for their dream. Adolescents begin to see how a life's goal can lead to happiness, feeling good about themselves and their family. It is thought that resilience among adolescents is enhanced in this way.[31,32]

It is further surmised that the activity in the fourth session of telling three good things that have happened in the day or week generates positive thoughts and emotions. This is a time for sharing and listening, to experience joy, and be amused. Thinking of three good things and why they happened also creates a potential for reflection, mutual understanding, empathy and, for the adolescents in this study, perceived happiness.[33] It is a time to focus on events and be noticed and appreciated by others for the good things that they enjoy during happy moments.[32] The activity re-educates their attention in how to look for what is good in their life.[10]

The activity of encouraging adolescents to identify a purpose in life by drawing a picture helps adolescents to form a clearer view about what might be their purpose in life. The activity brings engagement as they ponder about meaning in life. It also helps family members learn more about their adolescents, so they can support them in understanding life. Additionally, telling a good memory with the family provides a time for mutual caring and sharing. It can be a time to express gratitude

to family members, a time to say thank you or give a hug. When genuinely motivated and feelings are expressed, the adolescents and family members feel love, warmth, and strength. It is proposed that the program's activities lead to a decrease in depressive symptoms. The evidence supports that people who practice active gratitude are happier, more energetic and experience more frequent positive emotions.[34] This is because they learn to pay attention to the positive things that happen to them in their lives. It is proposed that the findings of this pilot study show that negative thoughts of self-views and behaviors of adolescents can be changed to positive self-views and positive behaviors. Having adolescents talk about their daily life encourages them to think about what is or can be meaningful and beneficial. After that, they may try to change behaviors and improve themselves toward more productive activities. Encouraging adolescents and family members to practice positive communication and focus on what they believe is good about the other person may lead to greater optimism and increased happiness, pride, and feelings of self-worth.[34] The program's activity provides a good chance to create or strengthen a positive relationship and improve interaction with family members. It is also a chance for participating family members to provide positive relationships and support the adolescents that could help strengthen adolescents' self-views and better adapt to daily life.[35] In addition, positive communication in a family, especially between parents and adolescents, is associated with less depression.[18]

An evaluation session should not be overlooked because it can be a formal and informal time of reflection and self-evaluation on what has transpired during the program. Giving and receiving praise and gratitude for participating in the program encourages adolescents to feel pride and increase self-esteem.[10] Both adolescents and family members should benefit by learning from the program's activities. Family members learn to understand, help, and support their adolescents. Adolescents are shown ways to feel happier, be more resilent, and reduce depressive symptoms.

Conclusion and Implication: Findings from the pilot, EN-HRF program are encouraging the six stages of the program may be an effective nursing intervention for reducing depressive symptoms among adolescents who are studying in public high school. The EN-HRF program represents an innovative approach to reduce depressive symptoms among adolescents. The program shows promise for psychiatric-mental health nurses to consider its implementation for high school students. Future research is needed to examine the EN-HRF program under more controlled conditions and whether it should be expanded.

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References

1. Kessler RC, Bromet EJ. The epidemiology of depression across cultures. Annual Review of Public Health. 2013; 34: 119–138. doi:10.1146/annurev-publhealth-031912-114409.
2. Arnarson EO, Craighead WE. Prevention of depression among Icelandic adolescents. Behaviour Research and Therapy. 2009; 47: 577-585.
3. Mojtabai R, Olfson M, Han B. National Trends in the Prevalence and Treatment of Depression in Adolescents and Young Adults. Pediatrics. 2016; 138(6): 1-12. doi: 10.1542/peds.2016-1878

4. Hyakutake A, Kamijo T, Misawa Y, Washizuka S, Inaba Y, Tsukahara T, et al. Cross-sectional observation of the relationship of depressive symptoms with lifestyles and parents' status among Japanese junior high school students. Environmental Health and Preventive Medicine. 2016; 21(4): 265-273. doi:10.1007/s12199-016-0522-6
5. Vatanasin D, Thapinta D, Thompson EA, Thungjaroenkul P. Testing a model of depression among Thai adolescents. Journal of Child and Adolescent Psychiatric Nursing. 2012; 25:195-206.
6. Gladstone TRG, Beardslee WR, O'Connor EE. The Prevention of adolescent depression. Psychiatric Clinics of North America. 2011; 34(1): 35-52.
7. Kim KJ. The ecology of youth depression. The Prevention Researcher. 2012; 19(4): 3-7.
8. Sadock BJ, Sadock VA. Concise textbook of child and adolescent psychiatry. Philadelphia: Lippincott Williams & Wilkins; 2009.
9. Tuijl LAV, Jong PJD, Sportel BE, Hullu ED, Nauta MH. Implicit and explicit self-esteem and their reciprocal Relationship with symptoms of depression and social anxiety: A longitudinal study inadolescents. Journal of Behavior Therapy and Experimental Psychiatry. 2014; 45: 113-121.
10. MacConville R, Rae T. Building happiness, resilience and motivation in adolescents, A positive psychology curriculum for well-being. Philadelphia: Jessica Kingsley; 2012.
11. Reivich K, Gillham JE, Chaplin TM, Seligman MEP. From helplessness to optimism: The role of resilience in treating and preventing depression in youth. In: Goldstein S, Brooks RB, editors. Handbook of resilience in children. New York: Springer; 2005.
12. Sawyer GM, Pfeiffer S, Spence HS, Bond L, Graetz B, Kay D, et al. School-based prevention of depression: a randomized controlled study of the beyond blue schools research initiative. The Journal of Child Psychology and Psychiatry. 2010; 51(2): 199-209.
13. Rao U, Chen LA. Depression in children and adolescents. In: Fusco JR, editors. Encyclopedia of Depression Research. New York: Nova Science; 2012.
14. Brière FN, Archambault K, Janosz M. Reciprocal prospective associations between depressive symptoms and perceived relationship with parents in early adolescence. The Canadian Journal of Psychiatry. 2013; 58(3): 169-176.
15. Piko BF, Bala´zs MA. Control or involvement? Relationship between authoritative parentingstyle and adolescent depressive symptomatology. European Child and Adolescent Psychiatry. 2012; 21: 149–155.
16. Kititussaranee S, Sontirat S, Surinya T. The relationship between parenting styles and depression of the fourth level students. Ramathibodi Nursing Journal. 2009; 15(1): 36-47.
17. Franklin SS. The Psychology of happiness. USA: Cambridge University Press; 2010.
18. Snyder CR, Lopez SJ, Pedrotti JT. Positive psychology. USA: Sage; 2011.
19. Wright MO, Masten AS, Narayan AJ. Resilience process in development: Four waves of research on positive adaptation in the context of adversity. In: Goldstein S, Brooks RB, editors. Handbook of Resilience in Children. New York: Springer; 2013.

20. Datu JAD, Valdez JP, Cabrera IK, Salanga MG. Subjective happiness optimizes educational outcomes: Evidence from Filipino high school students. Spanish Journal of Psychology. 2017; 20. doi:10.1017/sjp.2017.55
21. Thapar A, Collishaw S, Pine DS, Thapar AK. Depression in adolescence. Lancet. 2012; March 17; 379(9820): 1056–1067. doi:10.1016/S0140-6736(11)60871-4.
22. McCarty AC, Violette DH, McCauley E, Feasibility of the Positive Thoughts and Action Prevention Program for Middle Schoolers at Risk for Depression. 2011; 1-9. doi:10.1155/2011/241386
23. Brown HE, Pearson N, Braithwaite RE, Brown WJ, Biddle SJH, Physical Activity Interventions and Depression in Children and Adolescents. Spots Medicine. 2013; 43(3): 195-206.
24. Bolier L, Haverman M, Westerhof JG, Riper H, Smit F, Bohlmeijer E. Positive psychology interventions: a meta-analysis of randomized controlled studies. Bio MedCentral Public Health. 2013; 13(119): 1-20.
25. Freire T, Teixeira A, Silva E, Matias GP. Interventions for youth depression: from symptom reduction to well-being and optimal functioning. Journal of Behavior, Health & Social. 2014; 6(2): 9-19.
26. Wright LM, Leahey M. Nurses and families: A guide to family assessment and intervention. Philadelphia: F.A. Davis; 2013.
27. Conoley CW, Conoley JC. Positive psychology and family therapy: Creative techniques and practical tools for guiding change and enhancing growth. USA: Wiley; 2009.
28. Park N, Peterson C, Brunwasser SM. Positive psychology and therapy. In: Kazantzis N, Reinecke MA, Freeman A, editors. Cognitive and Behavioral Theories in Clinical Practice. New York: Guiford; 2010.
29. Trangkasombat U, Larpboonsarp V, Havanond P. CES-D as a screen for Depression in adolescents. Journal of the Medical Association of Thailand. 1997; 42(1): 2-13.
30. Bidwell DR. Deep listening and virtuous friendship: Spiritual care in the context of religious multiplicity. Buddhist-Christian Studies. 2015; 35: 3–13.
31. Becvar DS. Handbook of family resilience. New York: Sprinker; 2013.
32. Fredrickson B. Positivity. New York: Crown ; 2009.
33. Seligman MEP. Flourish: A new understanding of happiness and well-being and how to achieve them. London: Nicholas Brearley ; 2011.
34. Emmons RA. Thanks: how the new science of gratitude can make you happier. New York: Houghton Mifflin ; 2007.
35. Rungsang B, Chaimongkol N, Deoisres W. Predictors of Suicidal Ideation among Thai Adolescents. Journal of The Royal Thai Army Nurses. 2017; 18 (1): 64-73. (in Thai)