



Journal of Experimental Biology and Agricultural Sciences

<http://www.jebas.org>

ISSN No. 2320 – 8694

A pilot study of Resilience Programme through Group Dynamics on Academic Problems among the Matthayom Suksa 1 Students of Chiang Mai University Demonstration School

Chanakarn Kumkun , Supat Chupradit* , Pornpen Sirisatayawong 

Department of Occupational Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, Chiang Mai, 50200, Thailand

Received – November 01, 2021; Revision – January 14, 2022; Accepted – April 09, 2022

Available Online – June 26, 2022

DOI: [http://dx.doi.org/10.18006/2022.10\(3\).539.543](http://dx.doi.org/10.18006/2022.10(3).539.543)

KEYWORDS

Resilience

Resilience Program

Academic Problems

Pilot Study

Students

ABSTRACT

The objective of this study was to develop a Resilience Programme through Group Dynamics on Academic Problems among Matthayom Suksa 1 Students at Chiang Mai University Demonstration School. For this, four junior high school students were selected as respondents. The effect of the resilience program was evaluated through a general questionnaire, the Canadian Occupational Performance Measures (COPM), and Resilience Inventory. Further, the resilience program was developed by using cognitive behavioral therapy combined with acceptance and commitment therapy, group dynamics, and resilience according to the concept of Grotberg. The total period of the program was 11 weeks, with 1 session per week lasting for 60 minutes. Results of the study revealed that all the selected respondents had higher academic performance and most of them (75%) had higher academic satisfaction and resilience score. After participating in this program, the samples had a higher average resilience score (114.5) as compared to those before participating in the program (107.5). The results of this study can be concluded that the newly developed resilience program can improve the resilience component in almost all the students. Hence, it can be practiced in junior high school students to manage their academic problems. This program can also be a prototype for developing future resilience programs.

* Corresponding author

E-mail: supat.c@cmu.ac.th (Dr. Supat Chupradit)

Peer review under responsibility of Journal of Experimental Biology and Agricultural Sciences.

Production and Hosting by Horizon Publisher India [HPI]
(<http://www.horizonpublisherindia.in/>).
All rights reserved.

All the articles published by [Journal of Experimental Biology and Agricultural Sciences](#) are licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#) Based on a work at www.jebas.org.



1 Introduction

Students of junior high school are in their early teens, ranging from the age of 10 to 15 years (World Health Organization 2010). This is the right age of learning life skills that will help them to manage their emotions and the challenges of life. The changes at this age include the changes in the classroom from primary to secondary school. The changes in the body will also affect their perception of self-image. The changes in the mind which would like to have more freedom and the changes in the society which will give importance to the friends of same age more than the family, etc. The learning of early teens will happen from participation in everyday life activities (American Occupational Therapy Association 2014). The study activities are very important for early teens. The teens may face academic problems such as lacking discipline, using rude words, sleeping during class, lacking responsibility, and many others (Jullasub and Ativittayaporn 2008). They may also face challenges or adversity which put them in stress and anxiety (De Bruyn 2005; Sacker and Schoon 2007). It has been found that such pressure has a negative relationship with learning achievement (De Bruyn 2005). Hence, mental health promotion should be promoted for teens to help them grow completely according to their development and success in their studies (Fallon 2010). It has been found that resilience is a needed skill for teens. Resilience will help them to manage the challenges and academic problems effectively (Fallon 2010).

Resilience is the positive ability to efficiently manage or face hardship situations that might create stress and challenges in life (Tuntipivattanasakul 2008; Comas-Diaz et al. 2013; Ninthachan 2015; Bowden et al. 2018). The resilience can be contributed at the levels of personal, family, school, and community. Resilience consists of 3 components including external supporting factors (I have), personal realization (I am), and the realization of one's capacity (I can) (Grotberg 1995). If people have resilience, it will help them to create good feelings for their well-being and lead to suitable wellness (Abolghasemi and Varaniyab 2010). This is especially important in learning activities as resilience and participation in the activity will help to forecast the studying capacity of teens (Ayala and Manzano 2018).

From previous studies, it was reported that the research related to the resilience program has used various curing guidelines such as Cognitive Behavioural Therapy (CBT), which will focus on acceptance and commitment as known as Acceptance and Commitment Therapy (ACT), which is a therapy in group dynamics form (Burton et al. 2010; Towsyfyhan and Sabet 2017; Joyce et al. 2018). Group dynamics have seven steps which are introduction, activity, sharing, processing, generalizing, application and summary. This curing guideline will provide efficiency for contributing to resilience (Kittisoonthorn 2016). Kittisoonthorn (2016) developed a cognitive behavioral therapy program in the

form of groups, wherein they found that the experimental group had higher resilience and capacity in controlling emotions than the control group. In the experimental group, it was found that the scores for resilience and capacity in controlling emotion were higher after participating in the program. Moreover, Burton et al. (2010) developed a READY program based on acceptance and commitment therapy combined with cognitive behavioral therapy. Previous studies examine the efficiency of the contribution of resilience to wellness. The results found that the sample had more positive emotions, self-acceptance, and personal value. Besides, it was found that the efficiency of group dynamics on the contribution of resilience will help to create trust and collaboration in therapy. According to Cara (2013), a person will learn and develop via interaction with others through group dynamics.

In the present study, a resilience program was developed by using group dynamics on related problems with Matthayom Suksa 1 Students attending Chiang Mai University Demonstration School. The resilience program was developed under the idea of the resilience theory according to the concept of Grotberg, together with cognitive and behavioral therapy. The therapy focuses on acceptance and commitment by using group dynamics. The main objective of this study was to develop a study on the resilience program for Matthayom Suksa 1 students of Chiang Mai University Demonstration School.

2 Materials and Method

The quasi-experimental design was used in this research for evaluating the results of the newly developed resilience program. For this, a general information questionnaire, Canadian Occupational Performance Measures (COPM), which evaluates the academic performance and satisfaction (Law et al. 2020), and the Resilience Inventory which evaluate the resilience score was used to extract the data. The resilience Inventory was developed based on the Grotberg Resilience concept (Grotberg 1995). The developed questionnaire had 28 questions with Likert scales. The highest score was 140 while the lowest score was 28 (Ninthachan 2015). As respondents, four junior high school students of the academic year 2021, studying at Chiang Mai University Demonstration School were selected. The students were screened with purposive sampling by using the resilience score. The student who had the lowest resilience score in 8 orders of the population were selected for this study. Based on group dynamic theory, the sample size should have 3 to 8 persons in a group (Early 2017) that's why the present study had only 4 volunteers. The program was developed by using cognitive and behavioral therapy focussing on acceptance and commitment, group dynamics (Cole 2018), and resilience according to the concept by Grotberg (1995). The content accuracy of the developed theory was validated by qualified persons from the department of educational foundations and development, faculty of education; department of occupational

Table 1 General information of the selected Respondents

General information		Number of persons	%
Gender	Male	0	0
	Female	4	100
Number of Brothers and Sisters	0	0	0
	1	3	75
	2	1	25
	3	0	0
Birth Sequence	1 st in Sequence	4	100
	2 nd in Sequence	0	0
	3 rd in Sequence	0	0
	4 th in Sequence	0	0
Socioeconomic Status of the family	Have money left over	3	75
	Have enough money / Not have enough money left	0	0
	Have debts	1	25
Average income of the family (Monthly)	Less than 10,000 THB	0	0
	THB 10,001- THB 25,000	0	0
	THB 25,001- THB 50,000	2	50
	THB 50,001- THB 100,000	1	25
	THB 100,001 up	1	25
Expenses (Monthly)	Not more than THB 5,000	2	50
	THB 5,001- THB 10,000	1	25
	THB 10,001- THB 15,000	0	0
	THB 15,001 or higher	1	25
Current residence type	Home	4	100
	Dormitory	0	0
Currently residing with	Father and Mother	4	100
	Only with Father	0	0
	Only with Mother	0	0
	Other family members	0	0
	Friend	0	0
	Alone	0	0
Residential Style	Housing Estate/Detached House/Townhouse	3	75
	Tenement House / Commercial Building	1	25
	Condominium / Flat	0	0
	Crowded Rally	0	0

therapy, faculty of associated medical science, Chiang Mai University, Thailand; educational psychology and counseling, faculty of education, KhonKaen University, Thailand; Suanprung psychiatric hospital and Galyarajanagarindra Institute, Thailand. The total period for the whole program was 11 weeks with 1 sessions lasting for 60 minutes per week.

2.1 Statistical analysis

Descriptive statistical analysis was used to analyze the general information, the resilience score, and academic performance and satisfaction.

3 Results

3.1 General Information

Results presented in Table 1 revealed that all the selected respondents are female (100%) and are the eldest in the family. Further, almost all of them have a brother or sister (75%). In the case of economic status, 75 percent of the selected respondent's family has enough money left and the acquired income of the family is 25,001-50,000 THB per month. The sample spends money less than 5,000 THB per month (50%). All of the samples live at home with their parents in a housing estate, detached house, or townhouse (75%).

3.2 Family Information

Results presented in Table 2 showed the family information of the selected respondents. Results of the study suggested that the selected maximum respondents are staying together (75%) and their father and mother work as staff in government service (50%) and got a bachelor's degree (50%). Half of the respondents have a warm relationship in their family (50%).

3.3 Academic performance and satisfaction

Results presented in Table 3 suggested that after participating in the program, most of the respondents (75%) have higher academic performance and satisfaction levels as compared the before participating in the program. One respondent has low satisfaction and this might be poor understanding of the term and conditions of the design study.

3.4 The resilience

Results presented in Table 4 revealed that most of the sample (75%) had a higher resilience score after participating in the program (114.5) as compared the before participating in the program (107.50).

Table 2 Family information of the samples

Family information		Number of persons	%
Marital status of father and mother	Stay together	3	75
	Separated	1	25
	Divorced	0	0
	Father and/or mother passed away	0	0
	Father passed away	0	0
	Mother passed away	0	0
Father Employment	Government service	2	50
	State enterprise employee	0	0
	Company employee	0	0
	Trader	2	50
	Agriculture	0	0
	Self business	0	0
	General employee	0	0
Mother Employment	Government service	2	50
	State enterprise employee	0	0
	Company employee	1	25
	Trader	1	25
	Agriculture	0	0
	Self business	0	0
	General employee	0	0
Father Education	Primary School	0	0
	Secondary School	0	0
	Higher School	0	0
	Bachelor's Degree	2	50
	Master's Degree	1	25
	Doctoral Degree	1	25
Mother Education	Primary School	0	0
	Secondary School	0	0
	Higher School	0	0
	Bachelor's Degree	2	50
	Master's Degree	0	0
	Doctoral Degree	2	50
Relationships within the family	Warm family	2	50
	Sometimes quarrel	1	25
	Frequently quarrel	1	25

Table 3 Academic performance and satisfaction level of the selected respondents

Respondents (n=4)	Academic performance			Academic satisfaction		
	Before (PS1)	After (PS2)	Change (PS2-PS1)	Before (SS1)	After (SS2)	Change (SS2-SS1)
A	5.40	8.80	3.40	4.00	9.20	5.20
B	2.25	5.60	3.35	4.16	7.37	3.21
C	6.00	6.00	0.00	2.00	3.00	1.00
D	3.00	6.80	3.80	8.40	4.60	-3.80

Table 4 Resilience scores of the studied respondents

Resilience score	Respondents (n = 4)				(Mean)	(SD)	SEM
	A	B	C	D			
Before participating the programme	136	92	104	98	107.50	19.621	9.811
After participating the programme	134	112	107	105	114.5	13.329	6.665

4 Discussion and Conclusion

Results of the study suggested that the samples had higher academic performance and satisfaction after participating in the program. Furthermore, the average resilience score after participating in the program was also higher than before participating in the program. The higher resilience score might occur from students' realization of their external supporting factors, personal realization, and capacity which is consistent with the resilience component according to the Grotberg resilience concept (Grotberg, 1995). This resilience program was developed using group dynamics, so it might help them to realize the external supporting factors. They can understand and cope with their academic problems from their perspective and can learn strategies from other members' perspectives. It is consistent with the group dynamics concept which explained that group dynamics can promote people learning and develop interactions between the members of the group (Cara 2013). In the part of personal realization and capacity, students realized themselves through cognitive behavioral therapy, and acceptance and commitment therapy such as drawing, writing, and self-monitoring. The academic performance and satisfaction scores of all the subjects after participating in this program were improved as the resilience program was expected to make the subjects realize their capacity and also analyzed academic problems and improve their skills. The respondents can develop their personal resilience to manage the academic problem they face. Overall, the results of the study revealed that a resilience program can improve the resilience component in almost all the selected respondents. Hence, this newly developed resilience program can be practiced in students to manage the academic problem faced by junior high school students. This research is a pilot study that's why the sample size is very small, so, in future, further studies with large sample sizes are

needed. This program can be a prototype for developing future resilience program.

Ethics Approval

The data collection in this study was approved by the IRB of the Faculty of Associated Medical Sciences, Chiang Mai University, Thailand (Approval Number: AMSEC-64EX-018). The funding was supported by the Graduate school, Chiang Mai University, Chiang Mai, Thailand. There are no potential conflicts of interest to declare.

Conflicts of Interest

The authors declare no conflict of interest.

References

- Abolghasemi, A., & Varaniyab, S.T. (2010). Resilience and perceived stress: predictors of life satisfaction in the students of success and failure. *Procedia Social and Behavioural Sciences*, 5, 748-752.
- American Occupational Therapy Association. (2014). Occupational Therapy Practice Framework: Domain and Process (3rd Edition). *American Journal of Occupational Therapy*, 68, S1-S48.
- Ayala, J.C., & Manzano, G. (2018). Academic performance of first-year university students: the influence of resilience and engagement. *High Education Research & Development*, 37(7), 1321-1335.
- Bowden, L., Reed, K., & Nicholson, E. (2018). The contribution of occupation to children's experience of resilience: a qualitative descriptive study. *Australian Occupational Therapy Journal*, 65(4), 268-275.
- Burton, N.W., Pakenham, K.I., & Brown, W.J. (2010). Feasibility and effectiveness of psychosocial resilience training: a pilot study of the READY programme. *Psychology, Health, Medicine*, 15(3), 266-277.
- Cara, E. (2013). *Groups*. In Cara, E., & MacRae, A. (Eds.) *Psychosocial occupational therapy: An evolving practice* (3rd ed., pp. 671-711), New York: Delmar Cengage learning.
- Cole, M.B. (2018). *Group dynamics in occupational therapy: The theoretical basis and practice application of group intervention* (5th ed.). Thorofare, NJ: Slack Incorporated.
- Comas-Díaz, L., Luthar, S.S., Maddi, S.R., O'Neill, H.K., Saakvitne, K.W., & Tedeschi, R.G. (2013). The road to resilience. Retrieved from https://www.uis.edu/counselingcenter/wp-content/uploads/sites/87/2013/04/the_road_to_resilience.pdf, accessed on 15 July 2020.
- De Bruyn, E.H. (2005). Role strain, engagement and academic achievement in early adolescence. *Educational Studies*, 31(1), 15-27.
- Early, M.B. (2017). *Mental health concepts and techniques for the occupational therapy assistant* (5th ed.), Philadelphia: Wolters Kluwer.
- Fallon, C.M. (2010). *School factors that promote academic resilience in urban Latino high school students* (Unpublished PhD thesis), Chicago: Loyola University.
- Grotberg, E. (1995). *A guide to promoting resilience in children: strengthening the human spirit*. Bernard van Leer Foundation.
- Joyce, S., Shand, F., Tighe, J., Laurent, S.J., Bryant, R.A., & Harvey, S.B. (2018). Road to resilience: a systematic review and meta-analysis of resilience training programmes and interventions. *British Medical Journal Open*, 8, 1-9.
- Jullasub, N., & Ativittayaporn, C. (2008). The problem in studying and the behaviour of students in the secondary school that belongs to office of the basic education commission: OBEC, Songkhla province according to the attitude of students, teachers and parents. *Thaksin University Journal*, 3, 1-18.
- Kittisoonthorn, D. (2016). *Effect of cognitive behavioral therapy group counseling on resilience and emotion regulation in middle childhood*. Retrieved from <http://cuir.car.chula.ac.th/handle/123456789/55389> on July 15, 2020.
- Law, M., Baptiste, S., Carswell, A., McColl, M.A., Polatajko, H.J., & Pollock, N. (2020). *History of the COPM*. Retrieved from <https://www.thecopm.ca/about/history> October 10, 2020.
- Ninthachan, P. (2015). *The resilience in life: the idea, the evaluation, and the application*. Choodthong, Bangkok.
- Sacker, A., & Schoon, I. (2007). Educational resilience in later life: resources and assets in adolescence and return to education after leaving school at age 16. *Social Science Research*, 36(3), 873-896.
- Tuntipivattanasakul, P. (2008). *The manual of the activity in building the resilience for the public health personnel*. Agricultural Cooperative Federation of Thailand, Nonthaburi.
- World Health Organization (2010) Participant: *IMAI one-day orientation on adolescents living with HIV*. Retrieved from <https://apps.who.int/iris/handle/10665/44258> on July 15, 2020.