

The Effect of Group Counseling using Eclectic on World Health Organization Quality of Life Brief – Thai of Health Professionals in COVID-19 Situation

Wuttichai Yota¹

Abstract

This research aimed to: 1) Compare the effect of group counseling using eclectic on World Health Organization quality of life brief - Thai of health professionals in COVID-19 between before and after the study., 2) Compare the effect of general counseling guidelines using eclectic on World Health Organization quality of life brief -Thai of health professionals in COVID-19 between before and after the study., 3) Compare the effect of group counseling using eclectic and general counseling guideline on World Health Organization quality of life brief -Thai of health professionals in COVID-19 after the study. The samples were chosen by health professionals for the experimental through purposive sample technique. They were divided into 2 groups through a simple random sampling technique, the first group of 12 was the experimental group using group counseling using the eclectic program and the second group of 12 was the comparison group using general counseling guidelines. Each of the groups was under the study for 8 sessions of 1-2 hours each, twice a week with a total of 4 weeks. The instruments were: 1) World Health Organization quality of life brief - Thai test with alpha Kronbark of 0.84 2) A group counseling using eclectic program 3) A general counseling guideline. The statistics for data analyses were The Wilcoxon Matched Pairs Signed-Ranks Test and The Mann-Whitney U Test. The results revealed that: 1) The World Health Organization quality of life brief - Thai in health professionals in COVID-19 after the study through the effect of group counseling using eclectic increased at the 0.002 level of statistical significance., 2) The World Health Organization quality of life brief - Thai in health professionals in COVID-19 after the study through general counseling guideline increased at the 0.002 level of statistical significance, and 3) The World Health Organization quality of life brief - Thai in health professionals in COVID-19 through the effect of group counseling using eclectic was different at the 0.009 level of statistical significance from those through general counseling guideline. Health professionals should be encouraged to apply group counseling using technical eclecticism on stress under working crisis situations.

Keywords: Group Counseling using Eclectic, World Health Organization Quality of Life Brief – Thai, Health Professionals , COVID-19 Situation

1. Introduction

The Corona Virus Disease 2019 (COVID-19) pandemic is a worldwide general wellbeing crisis. It brings both financial outcomes, and medical issues and diseases, including COVID-19 alone. (Becker SP. and Gregory AM., 2020) Health states of individuals with ongoing infections Covid-19 emergency Centers for Disease Control and Prevention (CDC), Ministry of Public Health (2020) Covid-19 emergency, thus, there have been three episodes in Thailand. This makes all residents be straight for warbly or in a roundabout way impacted by issues that influence both truly, mentally, socially, and in the close by climate. Definitely, it can cause a lessening in personal satisfaction. From the effect that in the present worldwide society is

¹Lecturer of Faculty of Science and Technology, College of Asian Scholars



disruption world. That is a ton of surprising changes. Notwithstanding the Covid-19 pandemic that has impacted itself, society and the country in an incredible way, and it is critical that medical services laborers who are at the bleeding edge of this flare-up and face what takes steps to be the danger of getting this pestilence. For instance, openness to microorganisms, long working hours, mental strangulation, exhaustion, work burnout, and influencing physical and mental states, particularly changes in mental states. (Becker SP. what's more Gregory AM., 2020). Thus, more individuals are under pressure and influence their personal satisfaction. Thus, there are generally psychological well-being ramifications that are frequently upsetting and anxious. (Lee D. et.al., 2021) such as detainment and limitations on the ordinary exercises of the overall population and the local area. Arising impacts are sensations of dejection and separation, discouragement, just as practices that are self-damage or self-destruction. (Jovanovic A. et.al., 2020) It was coupled with innovative changes that massively affect society. Changes in the perspective are both driving elements and drawing in factors that make individuals in Thailand miserable in their regular routines. Stress is an extremely huge danger factor from physical and psychological circumstances that react to things that undermine, both inside and outside the individual. Well as episodes that cause strain, trouble, and uneasiness, and experience most psychological wellness issues. Particularly persistent pressure is brought about by the aggregation of stress for quite a while from occasions throughout everyday life. Also, it is a significant prediction to the event of discouragement and nervousness. The impact can influence everyday use, bringing about decreased and wasteful capacity. That makes variation what comes to that danger. It is to keep up with their own equilibrium in physical, mental, and social articulations. The hypothesis of mental guiding is the utilization of three speculations: 1) Rational Emotive Behavior Therapy is mandated treatment by the head of this hypothesis, Albert Ellis. There is a rule about this hypothesis that schooling is leaned in cognitivism. There are rules for direct and a weighty spotlight on the reasoning framework assurance analysis and new choices by utilizing a type of direct educating with instructing techniques. To repeat the learning system and spotlight on the utilization of insight and motivations to decide the reasons for the issue, just as to choose how to keep on winning with obstructions. The issue emerges adequately. (Yota W.,2022) This hypothesis joins philosophical ideas with humanist and social treatments. The remedial strategy is to alter the mentality from nonsensical to levelheaded, viably applied to the issues identified with tension and discouragement. 2) Person-Centered Therapy is a non-order treatment by the rule that people can utilize their knowledge to take care of issues. Furthermore, you can settle on compelling choices. However, when there is trouble, there will be disarray, nervousness, disappointment, and passionate constraint. Feeling clouds the capacity to reason and goes to self-challenging ways. 3) Reality Therapy is mandated treatment by the head of this hypothesis, William Glasser. A reality-based discussion focuses on bunch pioneers towards aiding bunch individuals who want to pick what is true. Address the issues of individuals by living in a quality world. Try not to infringe on the privileges of others. All pieces of the conduct are contrasted with resembling wheels. What's more, considerations resemble front haggles and feelings where the heads of the truth based conference bunch don't let bunch individuals address upsetting things. It causes lament, outrage, nervousness over and over on the grounds that those sentiments are something that individuals can't straightforwardly control.

A type of mental help is blended advising that requires applying brain research, directing to have unmistakable advantages. This perceives the conjunction with expanding the personal satisfaction of medical care laborer while giving a blended counseling program (Yota W., Praeseesakul S., 2021). The accentuation is all-encompassing: physical, mental, feelings and conduct. (Khon Kaen University., 2019). It makes a positive

power and kills issues brought about by the mental pressure of medical care laborer. To act fittingly for the circumstance in present-day times, there are also emotional wellness and prosperity guidance during COVID-19. Overall, it incorporates explanation of the difficulties that general society might in any case confront. By giving emotional wellness care guidance in a general and special way, there is the advance of pressure of the board for personal satisfaction that compares to various settings of learning the executives. This requires a proficient, ceaseless cycle (Zhang Y, Zheng J, Darko A., 2018) for the personal satisfaction of the World Health Organization in the Thai language. (World Health Organization Quality of Life Brief – Thai: WHOQOL-BREF-THAI) It addresses a clairvoyant valuation. (Mahatnirunkul S.et.al.(2002) The side is firmly flickered with social and natural administrations. There is zero on the personal satisfaction of medical services laborer in COVID-19 circumstances which is improving, though, non-fixed. It can acquire information brain science to diverse directing. As far as making new information and taking care of mind-boggling issues in a delicate and successful manner are concerned, what's more, is preparation to work on yourself, family, society, and countries among interruption universes. This incorporates day by day utilization that can discuss adequately with the center information, brain research, diverse directing, procedures that are applied in a helpful and helped manner, successfully and viably.

2. Objectives of Research

These objectives aimed to:

- 1) Compare the effect of group counseling using eclectic on World Health Organization quality of life brief - Thai of health professionals in COVID-19 before and after the study.
- 2) Compare the effect of general counseling guidelines using eclectic on World Health Organization quality of life brief -Thai of health professionals in COVID-19 before and after the study.
- 3) Compare the effect of group counseling using eclectic and general counseling guidelines on World Health Organization quality of life brief -Thai of health professionals in COVID-19 after the study.

3. Conceptual Framework

This research is a quasi-experimental study. It is to study the results of group counseling using eclectic (experimental group) and general counseling guidelines (comparison group) on world WHOQOL-BREF-THAI of health professionals in COVID-19 before and after the study. The randomized pretest-posttest comparison group design.

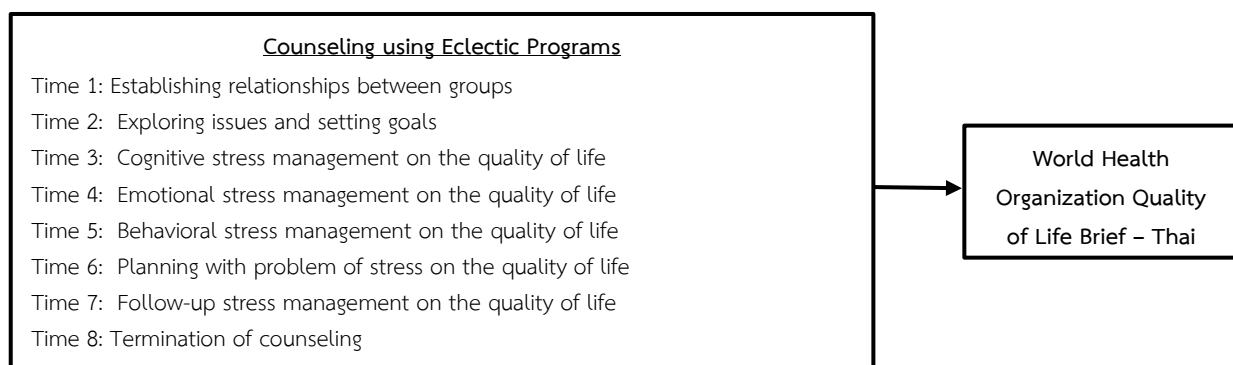


Figure 1 : Conceptual Framework



4. Population / Sample size

This study is a study in the population, namely health professionals in Sripatcharin Fort Hospital, Khon Kaen Province. The samples were based on the calculation of relevant research, the differences score of counseling psychology research, taking the social adaptation scores obtained by the pilot study of Chaiphiman S. (2009). By the pilot study, there are dimension values of the effect size of differences between groups with social adaptation scores at 1.44. This study is configured G-power at 1.00 and significant level value at 0.05. The total is the sample size, 20 people and set drop out 20% at 4 people. Therefore, in this study, a total summary of 24 samples were determined.

The study was conducted by selecting as by simple random sampling of 24 people. Qualification arm is 1) ages between 20-50 years old 2) health professionals are doctors, dentists, pharmacists, nurses, medical technicians, physiotherapists, Thai traditional physician, community health, assistant nurse, and including those responsible for the care of patients. 3) The assessment by Suanprung Stress Test 20; SPST-20 in high-severe stress (42 points or more) of Department of Mental Health (2015) and assessment by WHOQOL-BREF-THAI in rating level 26 – 60 points. It shows the poor quality of life by Mahatnirunkul S.et.al. (2002). The researchers defined the samples into two trial groups. 12 people were given counseling using eclectic programs, and 12 comparison groups received a general counseling guideline to provide thorough interaction.

5. Tools in Research Studies

1. The SPST-20 In this review, the scientists took it from the Suanprung stress assessment form. There is a pressure model that decreased the inquiry to 20 inquiries. Also, there are the consequences of the solid direct test aftereffects of the profoundly dependable pressure evaluation apparatus intraclass correlation coefficient; ICC of 0.89 (Uratnamnee S. and Lerdsamran S., 2019).

2. WHOQOL-BREF-THAI with measurements before and after group counseling using eclectic and general counseling guidelines before and after the trial, and an average analysis of the results were taken. In this study, the researchers took 26 Thai versions of the World Health Organization's quality of life measurement form. There is also a reliable and direct test of the World Health Organization's quality of life assessment tool with a high trust value ICC of 0.84 (Mahatnirunkul S.et.al., 2002).

3. Counseling uses eclectic program that combines consulting theory techniques to rational Emotive Behavior therapy, Person-centered therapy, and Reality therapy. The three experts are content validity on item-objective congruence index; IOC in between 0.6-1.0.

4. The general counseling guideline by three experts is content validity on IOC in between 0.6-1.0.

6. Study Design

Step 1: The researchers determined the consistency between SPST-20 and there are reliable and direct test results of the high-reliability assessment tool in ICC to 0.89 (Uratnamnee S. and Lerdsamran S., 2019). and the WHOQOL-BREF-THAI by measurements counseling using eclectic program and general counseling guidelines before and after the trial. An average analysis of the results was taken. In this study, the researchers took 26 Thai versions of the World Health Organization's quality of life measurement form. There is also a reliable and direct test of the World Health Organization's quality of life assessment tool with a high trust value ICC of 0.84 (Mahatnirunkul S.et.al., 2002).

Step 2: The researchers created counseling using the eclectic program by studying and reviewing research papers related to group counseling. Concepts and theories, techniques, and widens have been applied to suit the samples and variables studied. This combines group counseling theory techniques. There are three theories: 1) Rational Emotive Behavior Therapy 2) Person-centered Therapy 3) Reality Therapy by using 25 techniques which are building good relationships with each other, asking open questions, Listening technique, Silence technique, Reflection, Repeating, Unconditional acceptance, Shyness Management Training, Present technique, Planning technique, Reinforcement technique, Rational self-analysis, Self-control, Awareness of needs, situation, Creative troubleshooting, Rational and Emotional imagination, Positive self-talk, Group discussion experiments, Roleplay, Summary, Encouragement and Reverse data execution. The three experts check content validity on counseling using the eclectic program that IOC in between 0.6-1.0 and general counseling guideline that is three experts check content validity IOC in between 0.6-1.0.

Step 3: The researchers conducted the research with the experimental group in counseling using the eclectic program. They were divided into 2 groups through a simple random sampling technique. The first group of 12 was the experimental group using group counseling using the eclectic program and the second group of 12 was the comparison group using general counseling guidelines. Each of the groups was under the study 8 sessions of 1-2 hours each, twice a week with a total of 4 weeks.

Step 4: The researchers took the data obtained from the WHOQOL-BREF-THAI. Finally, analyze the data with research statistics.

8. Data Analysis

1. Comparative analysis of the WHOQOL-BREF-THAI of health professionals before and after the trial. The received counseling used the eclectic program. The basic statistics are mean, standard deviation and Wilcoxon matched-pairs signed-ranks test.

2. Comparative analysis is WHOQOL-BREF-THAI of health professionals before and after the comparison group who received a general counseling guideline. The basic statistics are mean, standard deviation, and Wilcoxon matched-pairs signed-ranks test.

3. Comparative analysis of the WHOQOL-BREF-THAI of health professionals before and after the comparison in group counselling using eclectic program and a group with general counseling guideline. The basic statistics are mean, standard deviation, and the Mann-Whitney U-test.

9. Results of Research

The general information of this study sample is the study in the sample in health professionals at Sripacharin Fort Hospital, Khon Kaen Province, 24 persons by purposive sampling (male 8 and women 16) age 26-30 year old is 33.33%, 26-30 year old is 66.67%. Experimental group is 12 people and comparison group is 12 people.

1) Compare the effect of group counseling using eclectic on World Health Organization quality of life brief - Thai of health professionals in COVID-19 before and after the study.

Table 1

| Experimental group | Before | | After | | Mean dif. | Z | P-Value |
|--------------------|--------|------|-------|-------|-----------|--------|---------|
| | Mean | S.D. | Mean | S.D. | | | |
| N=12 | 50.08 | 9.45 | 89.42 | 14.41 | 3934 | -3.062 | 0.002* |

*statistical significance level of $p < 0.05$



Table 1. The World Health Organization quality of life brief - Thai in health professionals in COVID-19 after the study through the effect of group counseling using eclectic increased at the 0.002 level of statistical significance.

2) Compare the effect of general counseling guidelines using eclectic on World Health Organization quality of life brief -Thai of health professionals in COVID-19 before and after the study.

Table 2

| Compression group | Before. | | After | | Mean dif. | Z | P-Value |
|-------------------|---------|------|-------|-------|-----------|--------|---------|
| | Mean | S.D. | Mean | S.D. | | | |
| N=12 | 52.17 | 9.19 | 74.42 | 12.02 | 40.15 | -3.061 | 0.002* |

*statistical significance level of $p < 0.05$

Table 2. The World Health Organization quality of life brief - Thai in health professionals in COVID-19 after the study through general counseling guideline increased at the 0.002 level of statistical significance.

3) Compare the effect of group counseling using eclectic and general counseling guidelines on World Health Organization quality of life brief -Thai of health professionals in COVID-19 after the study.

Table 3

| Sample | Variable | After | | Mean dif. | Z | P-Value |
|----------------------------|----------------------|-------|-------|-----------|--------|---------|
| | | Mean | S.D. | | | |
| Experimental group N=12 | WHOQOL-BREF- THAI | 89.42 | 14.41 | 15.00 | -2.604 | 0.009* |
| Compression group N=12 | WHOQOL-BREF- THAI | 74.42 | 12.02 | | | |

*statistical significance level of $p < 0.05$

Table 3. The World Health Organization quality of life brief - Thai in health professionals in COVID-19 through the effect of group counseling using eclectic was different at the 0.009 level of statistical significance from those through general counseling guidelines.

10. Discussion

This research aimed to;

1) Compare the effect of group counseling using eclectic on WHOQOL-BREF-THAI of health professionals in COVID-19 before and after the study. There were the WHOQOL-BREF-THAI in health professionals in COVID-19 after the study through the effect of group counseling using eclectic which increased at the 0.002 level of statistical significance. This is the utilization of standards from human's ideas and feelings, connected by the ABC design. They are an individual's apprehensive or passionate manifestations. That is the aftereffect of a conviction framework which will be persuaded by any experience or occasion. The objective of directing is to attempt to segregate and provoke an individual's inefficient convictions to that genuinely upsetting experience or occasion. It depends on the conviction that an

individual is ruled from the inside. However, it quite often thinks and is passionate in nonsensical articulation. Hence, changes in an individual's enthusiastic state should likewise be coordinated by the individual's essential arrangement of considerations or convictions. Also, advising is fundamental to aiding administration beneficiaries lessen enthusiastic and passionate pain. To motivation is to take care of issues or make powerful barbecue compelling objectives. This hypothesis of the individual-focused meeting is a course of help, permitting the guide to vent their sentiments and dissatisfactions. The guide's assistance centers around the advancement of people. By setting up middle person connections, they are significant so the guide gets themselves and see ways of aiding themselves. To have self-conviction, they feel more esteemed and attempt to work on themselves and decrease clashes in their souls. This is reliable with the examination of Yota W., Donpunha W. and Rerkjaree S. (2019) The review, which led to a segment of mental directing outcomes that consolidated hypotheses on pressure among patients was led. Managing pressure issues requires the standard of applying various speculations, joining methods to have the option to manage the issue adequately. In the actual viewpoint, it is seen as the state of being of medical care laborer, which influences the day to day existence. By perceiving the wellbeing and soundness of the body, impression of solace and easiness deal with actual issues. The solidarity has to carry on with day to day existence under COVID-19 circumstance. Mentally, medical services laborers know about their psychological perspective in managing issues in regular daily existence. This causes a view of good sentiments towards oneself. There is an acknowledgement of mental self-views. Pride is just as the impression of considerations and memory. Zero is on navigation and capacity to manage issues in regular stories under COVID-19 circumstances. Social connections are important for the impression of their associations with other people who work in a similar emergency clinic, alongside the view of the assistance of others in the public arena and being a partner to others in the public eye. Natural mindfulness influences day to day existence, for example, the discernment that life is free. They are no excessively severe guidelines. It is free from any danger throughout everyday life, alongside the insight that it is in a decent actual climate and prompts better self-thought by the real world. This urges advocates to act naturally. He had the option to deal with his way of life appropriately and the personal satisfaction expanded genuinely essentially at 0.002.

2) Compare the effect of general counseling guideline using eclectic on WHOQOL-BREF-THAI of health professionals in COVID-19 before and after the study were WHOQOL-BREF-THAI in health professionals in COVID-19 after the study. General counseling guideline was increased at the 0.002 level of statistical significance. This is the consequence of giving exhortation and is a scholastic aide that includes advising on self-taking care of issues from mental hypotheses and standards. It doesn't zero in on bunch advice, yet it gives a mental manual to individual general directing, with a similar measure of time and origination. Guideline methodology, techniques, and abilities and hypotheses covered during the COVID-19 circumstance. They are in accordance with Becker SP and Gregory AM. (2020) who clarified on a fundamental level. Guiding brain science is a hypothetically mixed methodology. Specialized blends and comparative mixes are as a reason for the assistance beneficiary to change over to be powerful to the advocate himself. Furthermore in accordance with Suwannapantha K.et.al (2020) who directed a review on factors related to the pressure to the COVID-19 outbreak among an example of 699 individuals. It was observed that elements related to pressure in the COVID-19 pandemic incorporate danger discernment factors with coronavirus circumstances, which have been found to give the most elevated level of help to individuals with stress, just as the speed increase of mindfulness and development of wellbeing practices, and social wellbeing adjustments justifiably. It was Genuinely huge increment at 0.002.



3) Compare the effect of group counseling using eclectic and general counseling guidelines on WHOQOL-BREF-THAI of health professionals in COVID-19 after the study. They were WHOQOL-BREF-THAI in health professionals in COVID-19 through the effect of group counseling using eclectic was different at the 0.009 level of statistical significance from those through general counseling guideline. This is from the head of the gathering to show a comprehension of the issue and will steadily get the gathering individuals to zero in on what they can handle, which implies a front wheel that is conducted and thought. From that point onward, it permits individuals to plan to show conduct. There are new activities that are unique in relation to what he used to and to feel much improved and make the interest more responsive. In this way, it is said that giving reality interviews, zeroing in on considerations and activities, is a meeting dependent on the idea of cognizant reasoning conduct that happens. Also, it is reliable with research by Liu Q., Wang Z., (2021) that found the COVID-19 pandemic. There are adverse results of the COVID-19 pandemic on young adult psychological wellness, which is controlled fundamentally by intellectual brain research, and studies have shown that youths' perceptual worries over the COVID-19 pandemic are related to gloom. Research shows that juvenile pressure concerns the COVID-19 pandemic. It has a fundamentally certain relationship with burdensome side effects. Strength factors are altogether connected with young adult pressure insights regarding the COVID-19 pandemic and huge burdensome indications that have been tormented under COVID-19 circumstances. Viably and genuinely protected, joined by and with a normal of personal satisfaction expanding by measurably fundamentally more than giving a genuinely critical general advising brain science guide at a degree of 0.009.

11. Summary of the study:

1) The WHOQOL-BREF-THAI in health professionals in COVID-19 after the study through the effect of group counseling using eclectic was increased at the 0.002 level of statistical significance.

2) The WHOQOL-BREF-THAI in health professionals in COVID-19 after the study through general counseling guideline was increased at the 0.002 level of statistical significance.

3) The WHOQOL-BREF-THAI in health professionals in COVID-19 through the effect of group counseling using eclectic was different at the 0.009 level of statistical significance from those through general counseling guidelines.

12. Recommendations

12.1 Recommendations for applying the discoveries:

1) According to this exploration, blended gathering advising can be applied to all medical clinics. All regions are in medical services laborer.

2) Observations of conduct during investment in the exploration of blended gathering meetings on the personal satisfaction of the World Health Organization can increment. Along these lines, it should keep on being a proactive gathering advising program with others.

12.2 Recommendations for your next research:

1) There ought to be a long-haul follow-up of 3 month and a half year to screen the personal satisfaction in day-to-day existence.

2) Should there be preliminary gatherings and examination bunches contemplate in different factors that influence physical and emotional wellness and explicit investigations in physical, mental, social, and profound regions contrast in working on personal satisfaction?

13. Reference

- Becker SP. and Gregory AM. (2020). Editorial Perspective: Perils and Promise for Child and Adolescent Sleep and Associated Psychopathology During the COVID-19 Pandemic. **Journal of Child Psychol Psychiatry.**61(1) ; 757–759.
- Chaiphiman S. (2009). **Effects of Trotzer Model Group Counseling on Self-Esteem and Social Adjustment of Senior High School Students [Thesis of Master of Science]**. Chiang Mai: Chiang Mai University.
- Department of Mental Health. (2015). **Department of Mental Health Measurement Guide**. Bangkok; Ministry of Public Health.
- Department of Mental Health. (2020). **Mental Health and Psychosocial Considerations During the COVID-19 Outbreak**. Bangkok; Ministry of Public Health.
- Jovanovic A.et.al. (2020). Assessing Resilience of Healthcare Infrastructure Exposed to COVID-19: Emerging Risks, Resilience Indicators, Interdependencies and International Standard. **Journal of Springer.** 40(1) ; 252 – 286.
- Khon Kaen University. (2019). **Educational Psychology**. Khon Kaen:Khon Kaen University Printing Company.
- Lee D.et.at. (2021). Examining the Effects of Social Determinants of Health on COVID-19 Related Stress, Family's Stress and Discord, and Personal Diagnosis of COVID-19. **Journal of Affective Disorder Reports.** 5(1) ; 183-191.
- Liu Q. and Wang Z. (2021). Perceived stress of the COVID-19 pandemic and adolescents' depression symptoms: The moderating role of character strengths. **Journal of Personality and Individual Differences.** 182(1) ; 62-68.
- Mahatnirunkul S.et.al. (2002). **Indicator of World Health Organization Quality of Life Brief – Thai**. Bangkok; Ministry of Public Health.
- Maha Sarakham University. (2018). **Psychology for Teachers**. Maha Sarakham :Maha Sarakham University Printing Company.
- Ministry of Public Health. (2021). **Corona Virus Disease 2019 (COVID-19) Situation**. Bangkok; Ministry of Public Health.
- Suwanaphant K.et.al. (2020). Factors Associated with Stress Due to Corona Virus Disease 2019 (COVID-19) Pandemic Among Students of The Faculty of Public Health and Allied Health Sciences, Praboromarajchanok Institute. 14(1) ; 138-148.
- Uratanamnee S. and Lertsamran S. (2019). Tress Anxiety and Depression of High Schoolteenager in Preparation for University Admission. **Journal of Psychiatric Nursing and Mental Health.** 31(1) ; 78-94.
- Yota W., Donpunha W., Rerkjaree S. (2019). **The Effect of Psychological Counseling with Physical Therapy Program on Muscle Pain in Patient with Chronic Myofascial Pain Syndrome**. Proceeding of the 2nd International and 4th National Conference. Chaopraya University. 220-231.
- Yota W. (2022). **Educational Psychology**. Khon Kaen: College of Asian Scholars Printing Company.
- Zhang Y., Zheng J., Darko A. (2018). How Does Transformational Leadership Promote Innovation in Construction? The Mediating Role of Innovation Climate and The Multilevel Moderation Role of Project Requirements. **journals of MDPI.**10(1) ; 1-19.