

Counselling Cognitive Behaviour to Improve Self-Regulation in Student Learning Activities at Christian Junior High School West Mapanget Manado

Ariantje J.A. Sundah^a, ^aGuidance and Counseling Study program Faculty of Education Universitas Negeri Manado, Email: juriansundah@gmail.com

The quality of ability by self-regulation is an important aspect which allows humans to survive and develop. The purpose of this study is to improve self-regulation skills in learning activities through the behavioural cognitive counselling of an experimental group. The study was conducted with a randomised pre-test post-test control group design. The subjects are second-grade students from the Christian Junior High School West Mapanget Manado, in the academic year of 2019–2020, who had low self-regulation. Self-regulation was measured by using the Miller and Brown design scale, which consists of seven aspects: receiving, evaluating, triggering, searching, formulating, implementing, and assessing. The data numbers were analysed using the Mann Whitney U Two Independent Sample Test. Whereas, the verbal data used a conversation analysis method through counselling records (verbatim). The analysis results of the experimental group showed the process of counselling cognitive behaviour can improve the self-regulation of the research subjects. In this case, the treated subjects. Several recommendations are suggested, as follows: (1) school counsellors need to explore cognitive behavioural counselling implementation for students' advancement; (2) junior high school principals should provide adequate school counselling services; and (3) in terms of advanced researchers, counselling cognitive behaviour was used to help improve other psychological aspects, such as self-esteem.

Keywords: *Counselling cognitive behaviour, Self-regulation.*



Introduction

Success has become the hope of every capable individual, and in preparation for future life. Self-regulation skills, as a source of perception, concern the personal agency that enables individuals to achieve success. It is an ability to balance between desire in the future, and what will be done today. Understanding the capacity of students to direct themselves in learning activities, both in class and at home, has become the main topic discussed among educators. Zimmerman (2000) asserted that self-regulation is a systematic effort to direct thoughts, feelings, and actions towards the achievement of one's goals.

Online learning currently requires the active role of students, as well as counsellors. Students are expected to be able to orient themselves with the ability of self-regulation in facing academic assignments and combating desires which consume study time. Even if the goals have been set, the process does not occur immediately due to individuals having many desires, and sometimes, conflict with each other. Some previous research findings found a significant relationship in self-regulation and learning motivation. There are also many studies which show that students who have been trained in self-regulation during the learning process, such as goal-setting, self-monitoring, and self-reflection processes, display high levels of motivation and achievement (Schunk, 1996; Wood, Bandura, & Bailey, 1990). This means that those who have not been trained in self-regulation as related to these elements, are more likely to display low levels of motivation and achievement.

Self-regulation in the learning process that results in underachievement, is a problem in the learning process becomes a fact in the school where this research was conducted namely Christian Junior High School West Mapanget. This fact supports that the importance of self-regulation has been recognised in several domains, including health (Creer, 2000), academics (Paris & Paris, 2001; Schunk & Ertmer, 2000), and athletics (Cleary & Zimmerman, 2001). Duckwprtha et al. (2011) showed the implementation of effective self-regulation strategies for adolescents in mastering developmental tasks. This will also be related to the realisation of the tasks of adolescent development, which are the subject of research.

Furthermore, Schunk and Zimmerman (1998) assert that independent learning strategies may be increasingly important because more students participate in distance learning in these situations without the physical presence of the instructor. This research was conducted to improve self-regulation through the cognitive behavioural counselling of selected students in Grade I of the Christian Junior High School West Mapanget Manado.

Self-regulation

In the academic world, recognising the principle of self-regulation has been incorporated into academic intervention programs to help students increase academic motivation and learning skills. Self-regulating students are active participants who are metacognitive, motivated, and behave in the learning process (Zimmerman, 1986). The capacity to self-regulate is a central assumption about learning, which is related to decision-making, problem-solving, and the management of educational resources in Indonesia. Furthermore, the country has promised assessment instruments and program interventions to promote self-regulation.

Miller and Brown (1991) stated self-regulation is the ability of individuals to direct and monitor behaviour in achieving certain goals by involving behavioural, cognitive, emotional, and social elements. Therefore, after being interviewed, it was concluded that the research subjects indicated low self-regulation. Miller and Brown conceptualise seven stages in self-regulation: (1) receiving relevant information, (2) evaluating the information and comparing it to norms, (3) triggering change, (4) searching for options, (5) formulating a plan, (6) implementing the plan, and (7) assessing the plan's effectiveness.

In this article, we will first take a close view of the various conceptualisations of self-regulation that stand out in the research psychology of educational literature, and on the types of instruments that have been made to measure students' ability to regulate themselves. We then discuss intervention programs that are designed to help students manage their influence, motivation, cognition, and service actions to achieve goals. This section also discusses the relative effects of interventions and identifies some constraints that have limited their effectiveness.

Most self-regulatory theories emphasise the inherent relationship with purpose. A goal reflects one's goals and refers to the quantity, quality, or level of performance (Locke & Latham, 1990). Setting goal standards is setting actions to be undertaken in achieving one's goals. The goals are achieved in various phases of self-regulation, including: forward-thinking, setting and deciding strategies for achieving goals; performance control, behavioural actions directed at the goal; monitoring performance; and self-reflection, evaluating one's progress towards goals and adjusting strategies to ensure success (Zimmerman, 1998).

The basic research question in the implementation of counselling services is: "What does 'self-management' imply?". Cognitive therapy facilitates individual learning to recognise awareness of thought patterns and failed behaviours, and change those errors towards a mindset accompanied by successful behaviour.

The description is an important basis for this research to be conducted through the service counselling cognitive behaviour group, as an intervention problem of self-regulation learning activities. Intervention through cognitive behavioural counselling is counselling based on two theories: counselling behaviourism, and cognitive counselling.

Behavioural cognitive counselling is a counselling theory which was popularised by Aaron T. Beck in 1960. In the beginning, the concept of counselling theory was known as cognitive therapy (CT), and then developed into cognitive behaviour therapy (CBT). Intervention is an approach to help individuals modify their moods and behaviour by changing self-destructive thinking. The basic premise of cognitive therapy is the way individuals feel or behave, which is largely determined by their assessment of events.

According to Aaron T. Beck (1901), he defines cognitive behavioural counselling as a counselling approach designed to solve counselee problems by way of cognitive restructuring, special beliefs, and counselee behaviour patterns. The expectation of cognitive behavioural counselling is the emergence of cognitive restructuring and belief systems to bring change for the better. Cognitive therapy facilitates individuals learning to recognise and change mistakes. It not only relates to potentiating thinking, but is related to happy thinking.

These interventions apply how to develop the relationship between the problem situation with the habit of responding to the problem behaviour. Individuals learn to change behaviour, and calm the mind and body, thus feeling better, thinking more clearly, and being able to make the right decisions.

Beck found that they usually experience a flood of negative thoughts that arise spontaneously. He dubbed this cognition, an 'automatic mind', and found their content fell into three categories: (1) negative ideas about themselves, (2) negative thoughts about the world, and (3) negative thoughts about the future. Beck's study concluded that the time spent reflecting on this cognition would generally cause counsellors to treat them validly. In response, he begins to help the counselee re-evaluate their thoughts and to think more realistically, which leads to increased emotional and behavioural functionality. According to Beck, the intervention succeeded in educating someone to recognise and realise their distorted thoughts and would challenge their effects.

The cognitive models shown by Beck include individuals who are depressed or anxious and have distortions or special tendencies related to the way they think. Negative automatic thoughts become increasingly important when supported by intermediate beliefs, such as maladaptive assumptions of conditional rules. In cognitive behavioural counselling the stages of counselling refer to cognitive and behavioural counselling because during the counselling

process, positive thought patterns are realised in the condition of behaviour, with the following stages:

a. Conducted an assessment

This stage aims to determine what is done by the counselee at this time. Assessment is conducted on real activities, feelings, and thoughts of the counselee.

b. Goal Settings

The counsellor and counselee determine counselling goals according to a mutual agreement based on good information to help the counselee achieve desired behavioural changes. Counsellors and counsees implement counselling techniques through the problems experienced by the counselee, such as excessive behaviour or deficit. The implementation of counselling techniques compares behavioural changes between baseline data with interview data.

Evaluations are made on the basis that the counselee does in his technical counsellor to help the counselee see the effectiveness of the behaviour the counselee is using.

c. Restructuring

The process by which this done is called cognitive restructuring. Cognitive restructuring is probably best done by implementing a multi-step process which involves: (1) the emergence of problematic cognitions, known as automatic thoughts or negative automatic thoughts about the self, the world, or the future; (2) formulating responses rationale for these automatic negative thoughts; (3) identifying and eliminating cognitive distortions found in negative thoughts; and (4) correcting assumptions, false predictions, and so on, using Socrates dialogue (AT Beck & Clark, 1997; ATBeck, Rush, Shaw & Emery, 1979; Foa & McNally, 1996; Hope, Burn, Hayes, Herbert & Warner, 2010; Mineka & Thomas, 1999).

Statement of the Problem

The main issues in this study are formulated, as follows:

1. Does cognitive counselling behaviour improve the learning behaviour of the counselee?
2. Is there a difference between counsees in the counselling cognitive behaviour experimental group, and group control?

Hypothesis

Based on the problem and research objectives, the hypothesis is formulated, as follows:

1. Counselling cognitive behaviour is effective in improving counselling learning behaviour.
2. There is a different increase in the learning behaviour between the counselling cognitive behaviour experimental group counselees, and control group counselees.

Research methodology

The chosen instrument for adaptation is the Self-Regulation Questionnaire (SRQ) developed by Brown, Miller, and Lawendowski (1999). This tool is also adapted to the conditions in the area of this study. The author defines self-regulation as the ability to act according to an independent internal plan for a purpose. More specifically, they regard self-regulation as the ability to implement the plan and pursue it to be. The instrument consists of 60 items, of which twenty items with negative words for the data scoring processing are reversed data. The questionnaire uses a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree', and the central point is 'uncertain'. The results of the questionnaire were counted as a total score of all 60 items. The higher the score, the better the capacity for self-regulation.

This quantitative research uses a pure experimental design (true experiment) and research designs from Fraenkel and Wallen (2006: 274). A pre-test post-test design with a control group was also used. This design was chosen with the following considerations: (1) the design is appropriate for the type of educational and psychological experimental research; and (2) this design is appropriate to test the hypothesis, and can provide adequate control for the variables that can be appropriately assessed. The main characteristics of this design are: (1) the experimental group received counselling cognitive behaviour treatment in placement of subjects in the experimental group, and subjects in the control group were chosen randomly; (2) the control group did not receive treatment; and (3) samples selected in the experimental, and control groups were given a pre-test using a self-regulation measuring instrument.

The experimental design of this research can be seen in the following figure:

The Randomised Pre-test Post-test Control Group Design

Figure 3.1. Experimental pre-test post-test design with the control group

Treatment Group	R	O ₁	X	O ₂
Control Group	R	O ₃	-	O ₄

Source: Fraenkel & Wallen, 2006: 274

Information:

R = The subject placement is a random assignment

O₁ = Pre-test in the experimental group (measurement level of self-regulation before treatment)

X = Treatment (Experimental Treatment) counselling cognitive behaviour

O₂ = Post-test in the experimental group (measurement level of self-regulation after treatment)

O = Measurement or initial pre-test observation and post-test observation (after treatment)

Control Group = not treated

O₃ = Pre-test in the control group

O₄ = Post-test in the control group

The data analysis for research hypothesis testing to determine the effectiveness of counselling cognitive behaviour was completed using a nonparametric statistical analysis technique called the Mann Whitney t-test analysis. This analysis technique is used to test the difference in mean scores of self-regulation. In other words:

1. The experimental group with counselling cognitive behaviour (pre-test and post-test)
2. Control group (pre-test and post-test)
3. Post-test in both groups (experimental, and control groups)

In this design, at the beginning of the measurement of the dependent variable are ten subjects in two groups: the experimental group, and the control group. After being given manipulation or treatment, measurements are made again on the dependent variable and with the same measuring instrument.

Most self-regulating theories emphasise the relationship inherent in a purpose. A goal reflects one's goals, and refers to the quantity, quality or level of performance (Locke & Latham, 1990). Goal setting involves standards or service goals as action objectives. Objectives are involved in various phases of self-regulation: receiving relevant information, evaluating the information and comparing it to norms, triggering change, searching for options, formulating a plan, implementing the plan, and assessing the plan's effectiveness.

Self-regulation is enhanced through counselling cognitive behaviour. Namely, the acceptance between counsellors, and in terms of creating close relationships and assessments for mutual contact between themselves and counsees, and between fellow counsellors, getting to know each counsellor's more specific understanding of self-regulation. To establish counselling implementation goals, in this case, the counsellors are aware of the impact of each behaviour shown. This includes determining if there is a gap or consistency between the thought, and what is shown. If there are gaps, how can they be reduced to increase consistency with the expected goals?

A counsellor, in implementing counselling cognitive behaviour, seeks to help counsellors to direct the mindset to operationalise the stages of increasing self-regulation. A counselee is conditioned to be able to enter an atmosphere of restructuring. It is the ability to evaluate themselves, evaluate behaviours, and plan new behaviours that are consistent with the objectives, based on an effective and productive mindset.

Test of Statistic Pre-test Post-test Difference Pre-test and Post-test group experiments

Test of Statistic	Pre-test	Post-test	Difference Pre-test and Post-test
Total	935	1139	204
Mean	93.5	113.9	20.4
Standard deviation	4.97	8.54	3.57
Minimum score	87	100	13
Maximum score	100	125	25
Variance	24.72	72.98	48.26

No.	Name	Previous Score (Before)	Current Score (After)	Differences	Information
1	DT	88	89	1	have no action taken
2	BT	87	88	1	

3	CL	90	91	1	
4	DS	92	94	2	
5	ES	93	94	1	
6	FL	95	94	1	
7	MM	97	98	1	
8	SM	92	92	0	
9	DL	87	88	1	
10	JS	96	97	1	

Test of Statistic	Pre-test	Post-test	Difference Pre-test and Post-test
Total	917	925	8
Mean	91.7	92.5	0.8
Standard deviation	3.65	3.53	0.2
Minimum score	87	88	1
Maximum score	96	97	1
Variance	13.34	12.5	0.84

Results and Discussion

In the experimental group, and as shown in Table 4.1, the pre-test obtained an average data understanding of the meaning of life of 93.5, with a standard deviation of 4.97. Meanwhile, the post-test obtained an average data understanding of the meaning of life of 113.90, with a standard deviation of 8.54. In Table 4.1, a value of 20.4, and a significance of 0.001 (<0.05) was obtained. Therefore, it can be concluded that there was a significant difference between the average ability of self-regulation at the pre-test or before the experiment, and at the post-test or after the experiment. This means the process of counselling cognitive behaviour increases the ability to reflect the research subjects.

In the control group, and as shown in Table 4.1, the pre-test obtained an average data of self-regulation ability of 91.7, with a standard deviation of 3.65. Meanwhile, the post-test obtained an average of self-regulation capability data of 92.5, with a standard deviation of 3.53. In Table 4.1, the value of t is 0.8, and the significance is 0.001 (<0.05). Therefore, it was concluded there was no significant difference between the average ability of self-regulation at the pre-test or before the experiment, and at the post-test or after the experiment. This means the subjects who did not receive treatment did not increase the ability of self-regulation within themselves.

The research findings highlight that counselling cognitive behaviour can be used as a treatment process for empowering growth and increasing competence and is a technique of

structuring the mindset and counselling behaviour in increasing learning activities. This article discusses the operation of the goal of self-regulation independently to include the influence of trait related objectives, and other factors. Acquiring self-regulation competencies is important as a task of developing and improving human functioning throughout the world (Bandura, 1997; Schunk & Zimmerman, 1997). Through understanding the role of goals, counsellors, teachers, and other practitioners will be able to work with students and counsees to help them in learning effective ways to organise their lives.

Research Implications

Counselling cognitive behaviour can improve the ability of self-regulation learning activities. This is triggered by the awareness of self-evaluating counsellors related to the behaviour that is shown and generated. The process of counselling cognitive behaviour restructuring techniques allows the emergence of the ability of counsees to evaluate the mindset to draw conclusions that can lead to successful learning activities.

Cognitive models are shown by Beck, where individuals who are depressed or anxious have distortions or special tendencies related to the way they think. Cognitive restructuring (CR) identifies the rules and assumptions that maintain depression, anxiety or anger, and then modifies these assumptions and develops other assumptions which are more helpful, not rigid, and are positive.

The counselling process provides an opportunity for each counselee to learn to show the expected behaviour and see the results. The expected behavioural actions and the results allow the counselee to get an award, which further triggers the next behaviour. Likewise, through training in the counselling process, counsellors have the opportunity to learn from the experience, which allows them to experience positive habituation.

Conclusion

Referring to the results of the research described in the previous section, the conclusion is outlined, as follows: (1) effective cognitive behavioural counselling increases the ability of self-regulation in learning activities; (2) there is a significant difference between subjects who are treated with cognitive behavioural counselling, and subjects who are not treated; and (3) the subjects who received cognitive counselling treatment showed an increasing ability in self-regulation, while the subjects who did not receive treatment, did not show increased ability in self-regulation.



Suggestion

Two suggestions are recommended: (1) counsellors should be mastered in applying counselling cognitive behaviour in helping counsees solve their problems individually, and more specifically, to improve the ability of self-regulation in learning activities to obtain success; and (2) research counselling training needs to be conducted for Guidance and Counselling teachers in schools.



BIBLIOGRAPHY

- Angela Lee Duckworth, Heidi Grant, Benjamin Loewy, Gabriele Oettingen, and Peter M. Gollwitzer (2011). Self-regulation strategies improve self-discipline in adolescents: benefits of mental contrasting and implementation intentions. *Educational Psychology* Vol. 31, No. 1, January 2011, 17–26
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Beck, J. S. (1995). *Cognitive therapy basic and beyond*. United States of America: The Guilford Press
- Boekaerts, M., Pintrich, P.R., & Zeidner, M. (Eds.) (2000). *Handbook of self-regulation*. San Diego: Academic Press.
- Beck, A.T., & Clark, D. A., (1997). An information processing model of anxiety: automatic and strategic processes. *Behavior research and therapy*, 35(1), 49-58
- Beck A. T., Rush A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York, NY: Guilford Press.
- Beck J. S. (2011). *Cognitive behavior therapy: basics and beyond (second edition)*. New York, NY: Guilford Press.
- Brown JM, Miller WR, & Lawendowski LA. (1999). *The self-regulation questionnaire*. In: VandeCreek L, Jackson TL, editors. *Innovations in Clinical Practice: A Source Book*. 17, 281-292. Sarasota, FL: Professional Resource Exchange.
- Campbell, D. T., Shadish, W., & Cook, T. D. (2002). *Experimental And Quasi-Experimental Designs for Generalized Causal Inference*. New York: Harcourt Academic Press.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Philadelphia: Taylor & Francis.
- Miller, W.R., & Brown, J.M (1991). Self-regulation as a conceptual basis for the prevention and treatment of addictive behaviors. In N. Heather, W.R. Miller y J. Greely (Eds.), *Self-control and the addictive behaviors* (pp.3-79). Sydney: Maxwell Macmillan.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Schunk, D. H., & Zimmerman, B. J. (1997). Social origins of self-regulatory competence. *Educational Psychologist*, 32(1), 195-208.



- Schunk, D. H. (1995). Self-efficacy and education and instruction. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment: Theory, research, and application* (pp. 281-303). New York: Plenum Press.
- Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning: From teaching to self-reflective practice* (pp. 1-19). New York: Guilford Press.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 133-149).