

The Effect of Idea-I Module on Student's Self Regulation and Behavior Management Skill

Azmiza Ahmad & Saemah Rahman

Fakulti Pendidikan, Universiti Kebangsaan Malaysia

Email: phdazmiza@gmail.com

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v7-i4/2903>

Published Date: 17 April 2017

Abstract

Students are exposed to various challenges that can affect their behavior in school and in everyday life. Self-regulation skill is among factors that are expected to help students manage their behavior better. A module called IDEA-i was built to help students develop student's self-regulation skills. This module contains 15 activities covering aspects of self-regulation and behavior management skills. In general, this study aims to determine the effectiveness of the IDEA-i module on students' behavior management skills. This study used a non-equivalent control group design. A total of 124 Form Four students in secondary schools in Malaysia were involved in the study. Students in the experimental group (n = 64) were exposed to IDEA-i by facilitator who have been trained to use the module prior to the intervention. This study used a questionnaire adapted from existing instruments and review of literature to measure self-regulation and behavior management skills. Data were analyzed using descriptive and inferential statistics. MANCOVA analysis showed that there was a difference in self-regulation and behavior management skill between the IDEA-i Module group with the control group. The findings of this study support that the use of the IDEA-i Module to help improve self-regulation skill and behavior management skill among students.

Keywords: Self-regulation skills, Behavioral Management Skills

1.0 Introduction

The main objective of education is to not only equip students with knowledge in a variety of fields but also to provide them with the necessary tools for self-education after leaving the school (Mohammad Azrien & Mohd Alwee, 2010). The teenagers we teach in school today are the ones who will be inheriting the future. We pile a mountain of hopes and dreams on their shoulders, praying that they will be able to continue safeguarding our country, culture and wealth. However, recent developments we hear on the news have reflect a growing concern on how teenagers are exposed to various, and serious, social depravities which leads to moral decay. Recognizing the value of teenagers in respect to our future, any issues related

to their development must be considered seriously. Therefore, there is an urgent need for the education system to incorporate steps that help students combat such immoralities and consequently achieve excellence.

Teenagers must acquire a set of values and a system of ethics that can be used as a guideline for their behaviour. This goal includes the development of noble values, beliefs and faith that are of worth to their lives. If they are able to understand their roles in life, they will be able to resolve conflicts that may arise. Understanding their role will help teenagers to become more goal-oriented and visualizes their self-concept in a more efficient and functional manner.

Even though many studies have been done concerning behavioural management skills and self-regulation, not many studies have focused on the relationship between the self-regulation and behavioural management skills. This study is important because it hypothesizes that there is a relationship between self-regulation and teenage behaviour (Rogers, 1951). Teenagers are able to become fully-functioning adults if they have high self-regulation habits; on the other hand, if their self-regulation is low, it may cause feelings of self-hatred which leads to self-isolation or aggressive behaviours. They may also misbehave and become too dependent on others in the face of problems. It can be concluded that students who are involved in misdemeanour may actually lack self-regulation skills. This shows how important self-regulation skills are in shaping teenagers who are able to manage their behaviour.

The main focus of this paper is on the development of self-regulation and behavioural management skills among secondary school students. This paper reported results of an intervention study using a module which is named "IDEA-i" which comprises self-regulation skills' elements, focusing on enhancing students' behavioural management. It is hoped that students' behavioural management skills can be enhanced using this module. The IDEA-i Module was built based on the module development procedure proposed by Russell (1974). IDEA-i is actually a problem-solving strategies and is an acronym for: I – Identify the problem, D- Develop alternatives, E- Execute a solution, A-Assess the results, while –i refers to the inspiration which is the outcome from the use of the IDEA method. In this research, students in the treatment group (using the IDEA-i module) are given 10 activities from the module and must solve the problems given to them using the IDEA-i method. The module was built based on self-regulation constructs proposed by Moilanen K, L. (2007). The constructs proposed were emotional resilience, active initiative, adaptability, perseverance, and self-monitoring. The validity of the module is more than 80% which is considered high (Sidek Mohd, Noah and Jamaluddin Ahmad, 2005).

1.1 Self-regulation Skills

Self-regulation is a process that involves active thinking, behaviour and emotions in the pursuit of certain goals (Woolfolk, 2015). Self-regulation can be explained from 3 perspective namely from behaviourist, social cognitive and cognitive theories (McDevitt and Ormrod, 2004). According to behaviourist, one's behaviour is fully controlled by environmental stimulus. On the other hand, social cognitive theory suggests that human beings are the main cause of their own behaviour, while cognitive theory states that it is actually one's cognitive processes that informs and monitors their behaviour.

However, for the purpose of this research, self-regulation refers to the ability to control responses in a flexible manner, to monitor, and to adapt behaviour, consequently leading to intellectual skills and clear and mature thought (Franken, 2002). In this research,

teenage self-regulation is discussed from the angles of emotional resilience, active initiative, adaptability, perseverance, and self-monitoring (Barkley, 1997).

Self-regulation can be discussed from five view points. The first aspect is emotional resilience which refers to how a teenager controls his emotions when he is angry or in an emotionally challenging situation, whether he allows himself to express his anger or vice versa. The second aspect is active initiative, where teenagers are able to take productive action even in challenging situations; they plan to achieve important goals and are able to execute a plan. The third aspect is adaptability, where teenagers are able to act in a flexible manner in uncertain situations. They should be able to maintain their plans and goals despite the hardships they face. The fourth aspect is perseverance, where teenagers are able to physically or emotionally restrain themselves from giving in to distractions that may stop them from achieving their goals. Additionally, failure to achieve these goals may even make them work harder. The fifth aspect is self-monitoring, where teenagers are able to assess their actions sensitively and are able to make good judgment calls during the planning stage. In this research, the IDEA-i Module was built based on these five constructs.

1.3 Behaviour Management Skills

According to Bear, Wolf and Risley (1968), behaviours are learnt. This means that new or alternative behaviours can be learned at any given time. Negative behaviours can be changed into something more positive if the individual is given intervention in a well-planned manner i.e. well-suited and systematic. Ragbir Kaur (2005) defines behaviour management as a plan to modify problematic behaviour according to a particular goal using suitable techniques. Stone (2007) states that if behaviours can be learned, then they can most certainly be changed or modified too. Most behaviours are operant, so behaviours change according to their environment, producing different outcomes. According to Noor Aini and Norhafizah (2015), managing behaviour is important in the formation of positive behaviours, instilling confidence and also enhancing academic achievement.

In this research, behavioural management skills refer to the processes used in managing behaviour among students. There are 3 phases in student management behaviour i.e. planning phase (before behaving), monitoring phase (while behaving), and assessment phase (after behaving).

The main focus of this research is to see the effects of the IDEA-i Module on behavioural management skills. Among the predictions of the experiment is that there will be an increase in terms of self-regulation and behavioural management skills among students in the treatment group (using the IDEA-i Module) compared to the control group. Self-regulation is extremely important because it is an individual's ability to control their emotions, conduct and behaviour which in turn influences their application of learning. Based on the Social Learning Theory by Bandura, self-regulation can be enhanced through learning experience and involves 3 self-control regulation components i.e. observation, assessment and self-response; this can be applied to experiences using the IDEA-i Module. According to the Behavioural Modification Theory which emphasises on the human cognitive dimension, a few action-oriented initiatives in learning effective and socially-acceptable behaviour management skills can be done.

2.0 RESEARCH METHODOLOGY

The sample consisted of 124 Form Four students who are of average academic achievement, with 64 students in the treatment group and 60 students in the control group. Data was

collected using two questionnaires a) Self-regulation Questionnaire and b) Behavioural Management Skills Questionnaire. The Self-regulation Questionnaire was adapted from the 'The Adolescent Self-Regulatory Inventory' (Moilanen 2005) which was modified from Novak & Clayton (2001). There are 18 items that measure teenage self-regulation skills. The scoring of the items were done based on a 5 point Likert scale. The Behavioural Management Skills Questionnaire was adapted from a study by Zakri (2014). There are three dimensions involved in this questionnaire i.e. planning, monitoring, and assessment.

The Cronbach Alpha value for the instruments were 0.822 and 0.877 for the Self-regulation Questionnaire and Behavioural Management Skills Questionnaire, respectively. These values show acceptable levels of reliability for both questionnaires.

3.0 RESEARCH FINDINGS

The main objective of this research was to determine the effects of the IDEA-i Module on the self-regulation and behavioural management skills of teenagers. Table 3.1 shows a descriptive analysis of mean score and standard deviation for the pre-test dependent variable scores of the IDEA-i Module group and control group. The Multivariate Analysis Test (MANOVA) was conducted to determine the difference in dependent variables, if any, between the IDEA-i Module group and control group, before using the module. This is because, in experimental research, pre-tests are used to observe consistency within the group using statistical tests and samples are not chosen randomly. Before the Multivariate Analysis Test (MANOVA) was done, the requirements for the use of multivariate tests were fulfilled. These requirements include normality and outliers, normality tests and multivariate isolated data, linearity, multicollinearity and singularity and homogeneity of variance-covariance matrices.

Table 3.1 Pre-test Mean Score and Standard Deviation

Variable	Mean	Standard Deviation	N
Self-regulation			
• IDEA-i Module Group	3.36	.32	64
• Control Group	3.30	.35	60
Behaviour Management Skills			
• IDEA-i Module Group	3.98	.58	64
• Control Group	3.73	.66	60

The results of the one-way MANOVA test showed that there is no significant difference in the combination of self-regulation and behavioural management skills variables between the IDEA-i Module group and control group in the pre-test (Wilk's lambda value = .960, $F(2,121) = 2.548$, and Sig. = 0.082 ($p > 0.05$)).

Univariate analysis with Bonferonni correction ($0.05/2 = 0.025$) showed that there is no significant difference in self-regulation $F(1, 122) = 1.21$, $P = 0.28$, $\eta^2 = .010$ and behavioural management skills $F(1,122) = 5.10$, $P = .026$, $\eta^2 = .040$ between the IDEA-i Module Group and the control group in the pre-test. Therefore, the MANOVA test was conducted on post-test scores to determine whether there is any difference between self-regulation and behavioural management skills.

Effects of IDEA-i Module on Self-Regulation and Behaviour Management Skills 3.1

Table 3.2 shows the mean difference for self-regulation and behavioural management skills between the IDEA-i Module group and control group in the post-test. The one-way MANOVA test results show that there is significant difference in the combination of self-regulation and behavioural management skills between the IDEA-i Module group and control group in the post-test (Wilk's lambda value = .778, $F(2, 119) = 16.988$, and Sig. = 0.000 ($p < 0.05$)).

Table 3.2 Post-test Mean Score and Standard Deviation

Variable	Mean	Standard Deviation	N
Self-regulation			
• IDEA-i Module Group	3.45	.35	64
• Control Group	2.92	.47	60
Behaviour Management Skills			
• IDEA-iModule Group	4.31	.46	64
• Control Group	2.92	.85	60

Table 3.3 shows the univariate analysis with Bonferonni correction ($0.05/2 = 0.025$) results. Research findings show that there is significant difference in self-regulation $F(1, 122) = 8.404$, $P = 0.004$, $\eta^2 = .065$ and behavioural management skills $F(1,122) = 34.129$, $P = .000$, $\eta^2 = .221$ between the IDEA-i Module group and control group in the post-test. Further examination of the mean score show that the scores for the IDEA-i Module group is higher compared to the control group for both variables. This shows that the implementation of the IDEA-i Module successfully improved self-regulation and behavioural management skills of the students.

Table 3.3 Univariate analysis of dependent variable effects between the subjects

Independent Variable	Dependent Variable	Type III Sum of Squares	D.K	F	Sig	η^2
IDEA-i Module	Self-regulation	.806	1	8.404	.004	.065
	Behavior Management	4.484	1	34.129	.000	.221

*Significant at level 0.025

4.0 DISCUSSION

Research findings show that there is a significant difference in the mean score in self-regulation and behaviour management between the IDEA-i Module group and control group.

This shows that learning and using the IDEA-i Module affects students' self-regulation. According to research findings, the impact size of the usage of IDEA-i Module on self-regulation compared to the control group is 0.14 (large). The effects of the IDEA-i Module can be seen from the implementation of the activities in the module. For example, Self-regulation (emotional resilience dimension) can be increased in self-auditing activities using the IDEA-i Module because in this activity, students showed emotional resilience when peers gave honest criticism on each other's negative characteristics. Students who felt sad and found it difficult to accept such criticism were calmed down by the facilitators and peers. In the end, students were able to accept their shortcomings and promised to better themselves.

In the 'Say It' activity, students have to take turns in contributing words to complete a sentence. Every student is required to say one word spontaneously in order to continue the sentence built by students before them. Students' active response can be seen when they focus on the final word uttered by the student before them. In this manner self-regulation (active response dimension) were emphasized and nurtured in the activity.

Through the 'Life Vision' activity, students are asked to draw their dream house, dream car, dream family, dream career, and dream amount of savings, and also write down when they hope to realize their dreams. Students are asked to talk to each other while completing this activity. In this noisy environment, a perseverant student will be able to produce good and neat drawings of their dream house, car, family, career and savings despite the loud surroundings. Therefore, self-regulation (perseverance dimension) can be enhanced using the 'Life Vision' activity.

All the activities are aimed to improved students self-regulation skills that are important in behaviour management. Bandura (1977) states that the function of self-regulation is to provide individuals with the ability to influence their behaviour to change their surroundings. Self-regulation is also related to emotional development; this is based on literature review that shows how psychologists view self-regulation processes as a central factor that moves motivation and human emotion. This finding is consistent with research conducted by Cazan (2011), Kolovelonis et al. (2012), Aرسال (2010), and Halina (2003)

The main objective of behaviour modification theory is to emphasise a particular behaviour such as cooperation, as human beings are able to understand concepts and also to control their own behaviour. People are able to influence others' behaviours, just as others influence theirs. In this research, students were able to acquire new habits after going through the IDEA-i Module. This research is consistent with a few other studies; for example, a research conducted by Kazdin et. al (2014) who studied the effects of parental management training and cognitive problem solving training on antisocial behaviour. Besides that Kubany and Sloggett (1991) studied the importance of the factor of focus in monitoring learning for behaviour control. Sun Ju Chang et al (2014) studied behavioural intervention based on behavioural skills models, while Dobbs-Oates et al. (2011) studied the relationship between preschool teachers from the angle of behavioural management and Wan Su (2008) studied the relationship between personality and deviant behaviour among university students. According to past research, it is clear that behavioural management skills can be learnt using a variety of methods, such as module driven education (IDEA-i Module).

5.0 CONCLUSION

In conclusion, this research is a strong foundation for further research on the use of IDEA-i Module for other aspects that contribute to the realisation of student excellence. Supian et al. (2010) stated that the completion and perfection of the potential towards excellence must

be done throughout time in school. In this context, the teaching and learning aspect as well as monitoring is every school leader's main duty. Students must possess skills in self-regulation and behavioural management so that they are able to face challenges in this globalised world. Therefore, educators must play a role to help students use their thinking skills to become excellent world citizens. The researcher hopes that this research will help policy makers to create various methods that contribute towards the making of excellent students.

REFERENCES

- Abu Bakar, N. (1995). *Penilaian Afektif*. Kajang: Masa Enterprise.
- Arsal, Z. (2010). The effects of diaries on self-regulation strategies of preservice science teachers. *International Journal of Environmental and Science Education* 5(1): 85-103.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barkley, E. R. (1997). *ADHD and The Nature of Self Control*. New York: Wadsworth Thomson Learning.
- Cohen. (1988). *Statistical Power Analysis for the Behavioural Sciences*. Ed. Ke-2. New Hillsdale: NJ: Lawrence Erlbaum Associates.
- Dobbs-Oates J., Joan, N., Kaderavek, Ying, G., & Justice L.M. (2011). Effective behavior management in preschool classrooms and children's task orientation: *Enhancing emergent literacy and language development* 26 (4): 420-429.
- Erikson, E. (1980). *Identity and The Lifecycle*. New York: Norton.
- Franken, R.E., (2002). *Human Motivation*. Belmont, CA.:Wadsworth.
- Havinghurst, R. J. (1972). *Development Tasks and Education*. New York: D, McKay.
- Halina, K. (2003). Regulasi sendiri metakognitif dan tahap keupayaan penyelesaian masalah Kimia di kalangan pelajar Tingkatan empat. Tesis Sarjana, Universiti Teknologi Malaysia.
- Kazdin, A. E. (2014). *Single-Case Research Designs: Methods for Clinical and Applied Settings*. New York, NY: Oxford University Press.
- Kolovelonis, A., Goudas, M., Dermitzaki, I., & Kitsantas, A. (2013). Self-regulated learning and performance calibration among elementary physical education students. *European Journal of Psychology of Education* 28: 685-701.
- Kubany, E. S., Weiss, L. E., & Sloggett, B. B. (1991). The good behavior clock: A reinforcement/time out procedure for reducing disruptive classroom behavior. *Journal of Behavior Therapy and Experimental Psychiatry* 2: 173-179.
- McDevitt, Tresa M. & Ormrod, Jeanne, E. (2004). *Child Development: Educating and Working with Children and Adolescents*. Edisi ke-2. New Jersey: Pearson Education, Inc.
- Mohammad Azrien, M. A., & Mohd Alwee, Y. (2010). Motivasi, pembelajaran pengaturan sendiri dan prestasi akademik: satu kajian di kalangan pelajar Asasi Pengajian Islam Universiti Malaya Nilam Puri. Tesis Dr. Fal, Universiti Malaya.
- Mohd Majid, K. (2000). *Kaedah Penyelidikan Pendidikan*. Kuala Lumpur: Dewan Bahasa & Pustaka.
- Moilanen, K. L. (2007). The Adolescent Self-Regulatory Inventory: The development and validation of a questionnaire of short-term and long-term self-regulation. *Journal of Youth and Adolescence* 36: 835-848.
- Musliha Salma, M. R., Rohana, H. & Aminudin, A. (2011). Menyelesaikan masalah pembangunan akhlak pelajar: analisis penerapan kemahiran generik dalam amalan pendidikan. *Journal of Edupress* 1: 223-229.

- Noor Aini A. & Norhafizah A. H. (2015). Tahap pengetahuan guru pendidikan khas apabila mengurus tingkah laku murid bermasalah pembelajaran. *Asia Pacific Journal of Educators and Education* 30: 73–88.
- Novak, S.P., & Clayton, R. R. (2001). The influence of school environment and self-regulation on transitions between stages of cigarette smoking: A multilevel analysis. *Healthy Psychology* 20: 196-207.
- Ragbir Kaur, J. S. (2005). Panduan ulangkaji ilmu pendidikan untuk Kursus Perguruan Lepas Ijazah (KPLI). Subang Jaya: Kumpulan Budiman Sdn. Bhd.
- Rogers, C. (1951). *Client-Centered Therapy: Its Current Practice, Implications, and Theory*. Boston: Houghton Mifflin.
- Rusell, J.D. (1974). *Modular Instruction: A Guide to the Design, Selection, Utilization And Evaluation of Modular Materials*. New York: Publishing Company.
- Sidek, M. N. & Jamaludin Ahmad. (2005). *Pembinaan Modul: Bagaimana Membina Modul Latihan dan Modul Akademik*. Serdang: Penerbit Universiti Putra Malaysia.
- Stone, S. (2007). The effects of token economy of improve social and academic behavior with primary aged child with disabilities. *International Journal of Special Education* 6(2): 15–23.
- Ju Chang, S., Choi, S., Kim, S. & Song, M. (2014). Intervention strategies based on information motivation behavioral skills model for health behavior change: a systematic review. *Asian Nursing Research* 8(3): 172-181.
- Supian, H. & Khadijah, D. (2010). Amalan kepimpinan lestari dan hubungannya dengan prestasi kerja guru sekolah rendah yang menerima tawaran baru di daerah Segamat. Tesis sarjana, Universiti Teknologi Malaysia.
- Wan Su, H. (2008). Hubungan personaliti, kemahiran sosial, kebimbangan dan rakan sebaya dengan tingkah laku devian di kalangan pelajar universiti. Tesis Dr. Fal, Universiti Malaysia Perlis.
- Woolfolk, Anita. (2015). *Educational Psychology*. Edisi Ke13. Boston: Allyn & Bacon.
- Zakri, A. (2014). Kemahiran meta-tingkah laku, kemahiran membuat keputusan dan tingkah laku disiplin pelajar. Tesis Dr. Fal, Universiti Kebangsaan Malaysia.