

Development, Validity, and Reliability of the Rational Emotive Behavioral Therapy Counseling Module (REBTGCM) for Adolescent Smokers

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Abstract

This study aims to evaluate the validity and reliability of the Rational Emotional Behavioral Therapy Counseling Module (REBTGCM) for adolescent smokers. REBTGCM was developed for adolescent smokers aged 18 to 25 years old using the Sidek Development Model, REBT application, and multiple psycho-educational approaches. For the REBTGCM validation procedure, eight professional panelists were chosen. Thirty adolescent smokers from a Skills Education Institution in Perak took part in the reliability procedure. The findings indicate that the content validity of REBTGCM is .86, and its overall reliability is .95, as measured by Cronbach's Alpha. Based on these findings, REBTGCM is a novel discovery that can be applied in counseling services to assist adolescents with smoking behavior problems.

Keywords: Validity, Reliability, Rational Emotive Behavioral Therapy Group Counseling Module (REBTGCM), Adolescent Smokers.

Introduction

Smoking is not a new phenomenon that contributes to global health problems. Each year, more than 8 million people are killed by tobacco use (World Health Organization, 2019). The number of smokers has increased steadily since the year 2000. According to the World Health Organization (WHO) (2009), there were over 1.25 billion smokers worldwide in 2009, including 1 billion men and 250 million women smoking. WHO (2019) reports that there are nearly 2 billion smokers today. In Malaysia, the Ministry of Health Malaysia (MOH), as part of the National Health & Morbidity Survey (NHMS), identified adolescent smokers ages 13 to 18 with an estimated population of 342,210 people (MOH, 2017). There are 726 574 smokers aged 19 to 24; 737 504 smokers aged 25 to 29; 718 979 smokers aged 30 to 34. Male adolescent male smokers made up to 25.3% of the total smoking population in Malaysia, while female adolescent smokers made up for 6.7%.

MOH (2017) and the U.S. Department of Health and Human Services (USDHHS) (2019), teen smoking is becoming increasingly concerning. Smoking at a young age is linked to health problems, decreased physiological productivity, and a propensity for substance abuse. According to the WHO (2019), smoking kills approximately 5.4 million each year, or one every six seconds. Smokers have a 15-year life expectancy advantage over nonsmokers. In Malaysia,

the percentage of deaths caused by smoking was 15 to 20% for men and 5 to 10% for women in 2010 (Rahman, 2018, para. 2) Therefore, the issue of smoking addiction among Malaysians should not be taken lightly, given that the country has 4.8 million smokers, with 22.6% of them aged 15 to 24 (MOH, 2017).

The Ministry of Health expressed concern about the rising smoking prevalence among young people (MOH, 2018). Despite numerous efforts by the government, including the annual "No Tobacco Day" campaign, the percentage of young people who have quit smoking has not yet reached the desired level. Even though the government is currently drafting the Smoke-Free Generation Act 2040, attention must also be paid to the treatment aspect so that a recovery process coincides with the implementation of the law's provisions for any youth who has been addicted to nicotine (Hamid, 2022, para. 1). Johanne and Nicholas (2016) argue for the inclusion of smoking cessation counseling services in adolescent health assessments as well as the promoting a tobacco-free school environment. This method is intended to ensure that smoking behavior can be controlled and reversed from an early age.

Mourik et al (2020) discovered that a lack of knowledge and exposure to smoking cessation information made it difficult for smokers to quit smoking. According to Zoe et al (2021), most smokers fail to quit smoking due to a lack of smoking cessation management knowledge, such as information on the dangers of smoking, how to quit smoking, addiction management techniques, and health management. When smokers seek treatment, their understanding of how to manage their smoking addiction improves, as does their willingness to quit smoking (Bashirin et al., 2020; Andrea et al., 2020). Furthermore, Layoun et al (2017) and Johanne and Nicholas (2016) agree that young smokers are focused on receiving early treatment in order to quit smoking before reaching adulthood. Professionals like a counselor play an important role in assisting people who are addicted to drugs, alcohol, and cigarettes to recover from their addictions and develop the potential for psychological well-being (Bishop, 2019; Hassan Shaari, 2021).

So one of the therapy options that are quite beneficial is the installation of group counseling. A face-to-face helpful relationship process between the counselor and the client is referred to as treatment in counseling. Structured approaches can effectively implement a therapy procedure (Mahfar & Senin, 2015). Through the pertinent module, counselors can create a treatment plan. A module includes certain exercises meant to aid the client in developing common sense (Ahmad, 2008). Implementing structured counseling sessions can aid problems like substance abuse by building more reasonable beliefs, and raising self-motivation to stop abusing substances (Jogdand, 2018; Omeje al., 2018; Kurniawat & Basuki, 2019). As a result, the primary objective of the development of REBTGCM is to assist teenage smokers in developing insights, removing irrational beliefs, and boosting motivation for the readiness to stop.

Literature Review

Adolescent Smokers

According to previous research, the factors that lead to the initiation of smoking behavior are peer influence (Yahaya et al., 2018; Ball et al., 2018), family member smoking influence (Hiemstra et al., 2017; Zaborskis & Sirvyte, 2015), the risky environment of educational institutions (Kuang et al., 2017; Grapatsas et al., 2017), and the ease with which cigarette products (Folan et al., 2017). Yahaya et al (2018), in a friendly environment, invitations and

acceptance from friends cause these teenagers to be easily influenced by smoking behavior. Additionally, smoking family members such as parents, siblings, and relatives increase the likelihood that those influences will be followed. Kuang et al (2017) also discovered that, despite being described as a safe environment, the socialization process among students may increase the influence of smoking. Worryingly, the dumping of unregulated cigarette sales makes it easy for teenagers to buy and repeatedly buy cigarettes (Folan et al., 2017). These images support Erikson's (1994) claim that the adolescent phase is the most difficult because adolescents readily experiment with their surroundings to see how their emotions and behavior affect them. Because the environment is both pleasant and dangerous, many adolescents engage in disciplinary issues, such as attempting to use illegal substances such as drugs, alcohol, and cigarettes.

Furthermore, smoking behavior may experience dependence and addiction due to the presence of the primary chemical component known as nicotine. When smoking is practiced repeatedly, nicotine in cigarettes heightens and maintains the feeling of desire (WHO, 2019; MOH, 2019; Glover et al., 2005; Fagerstrom, 1982). Between 7 and 10 seconds, nicotine is easily absorbed into the body, causing the heartbeat to quicken and the blood pressure to rise. As their body's need for nicotine decreases, smokers will experience fatigue and anxiety. This phenomenon leads to a high level of cigarette dependence and addiction. Additionally, prior research has shown that male teenagers are more affected by nicotine addiction than female teenagers (Chinwong et al., 2018; Coban et al., 2018). According to Martinez et al (2019), smokers who switched from traditional to modern cigarettes had higher levels of nicotine dependence.

Previously, some researchers reported a significant relationship between psychological aspects and smoking behavior in a different context (Gulsen & Uygur, 2018; Unubol & Sayar, 2019). Huang et al (2019), smokers frequently justify their smoking behavior by citing various reasons. Furthermore, smokers' thinking considers smoking as an alternative defense mechanism (Orculo & Teo, 2016), reinforces unreasonable reasons (Vajrevelu et al., 2015), and forms implicit beliefs (Ren et al., 2019). Additionally, stress is frequently cited as the primary motivator for smokers to keep smoking. Smokers believe that smoking helps them deal with stress (Choi et al., 2015; Zvolensky et al., 2018). Worryingly, a heavy smoker or someone with a high dependency sees smoking as one of the activities that can help them relax while working or studying (Suhanyi et al., 2020; Huang et al., 2019). This situation reinforces smoking behavior while increasing nicotine dependence and decreasing willingness to quit smoking.

Rational Emotive Behavioral Therapy

The counseling treatment employed in this study is based on the Rational Emotive Behavioral Therapy (REBT) theory. Group counseling is a relationship process in which individuals support and help each other. It is also dynamic in terms of achieving positive change, trust, unconditional acceptance among members, and mutual understanding among members (Corey, 2016). According to Ismail (2017), the primary goal of REBT group therapy is to teach clients how to change their emotional and behavioral dysfunction into a more positive state and to be able to deal with any unexpected events. REBT focuses primarily on the development of healthy mental and emotional traits such as self-interest, social interest, self-direction, self-concept, tolerance, acceptance of the unexpected, willingness to change, and

responsibility for emotional disturbances that occur (Dryden & Neenan, 2011; Ellis et al., 2010; Froggatt, 2005).

In the context of substance abuse, such as drugs, alcohol, and cigarettes, Bishop (2019) argues that REBT has a comprehensive role in treating behavioral dependence and addiction. REBT focuses on the treatment and rehabilitation of irrational belief systems that have a strong influence on negative emotions and behaviors, making it difficult to break the cycle of dependence and addiction. In other hand, Ellis (1995) human problems stem from how an individual perceives the event and the problem. Frequently, a person's core irrational beliefs include demandingness, awfulizing, discomfort tolerance, and people rating (Ellis & Bernard, 1985; Froggatt, 2005; Bishop, 2019). These ways of thinking lead to negative emotions and maladaptive behavior.

Based on the researcher's observations, the REBT treatment method focuses less on smoking behavior. Several previous studies have demonstrated that REBT is highly effective in treating substance abuse. Base on Amrapali (2018), REBT effectively reduced smoking dependence in obsessive-compulsive patients. Not only that, REBT treatment has increased the motivation of smokers to quit smoking. Furthermore, Omeje et al (2018) discovered that REBT effectively reduced irrational beliefs among HIV patients who were alcohol addicts. Kurniawat and Basuki (2019) concluded in a meta-analysis study that the REBT approach could help people avoid the drug addiction by encouraging more rational problem-solving. Additionally, REBT promotes rational thought, lessens anxiety after treatment, curbs aggressive behavior, lessens the harmful impacts of drug usage, and assists clients in making wise judgments in the future. These beneficial outcomes have given individuals the opportunity to become more motivated and begin effectively managing their drug addiction.

Although the REBT approach is not given much attention in the issue of smoking behavior, it has been shown to be effective in treating a variety of psychological issues, including effectively reducing the rate of irrational beliefs and increasing self-esteem in troubled teenagers (Mat & Jaafar, 2022), developing self-concept, resilience and coping skills (Khalid, 2017), removing feelings of self-doubt, low self-esteem and high irrational self-belief among bullying victims (Fauziah, 2016), reducing the level of stress, anxiety, depression, paranoid and psychosis among students universities (Xu & Liu, 2017), reduce irrational beliefs and anxiety among athletes (Martin, 2016) and help stress management (Ugwoke et al., 2017; Ilechukwu et al., 2021).

The REBT approach seeks to alter the self's irrational beliefs and illogical actions (Bishop, 2019; Ellis, 2003; Dryden & Neenan, 2011). REBT techniques, such as challenging irrational beliefs, help people change their minds and form a more rational understanding of themselves and their lives. Ern and Yaakob (2017) discovered that challenging a client's irrational beliefs successfully increased confidence and self-esteem. This finding is consistent with the fundamental concept of REBT, which states the primary requirement for producing a new effect in a person is to treat irrational belief systems (Froggatt, 2005). Although REBT techniques are thought to emphasize cognitive aspects, they do not exclude the role of emotion and behavior, which are inextricably linked. REBT holds that human thoughts, emotions, and actions do not exist in isolation but rather overlap significantly. Emotions and behavior strongly influence each other's thinking and vice versa (Ellis, 2003; Ellis et al., 2010).

Research Methodology***Module Development***

The module construction procedure in this study refers to the construction model developed by Noah and Ahmad (2005) which is divided into two stages. The first stage is module draught preparation, which includes nine steps starting with goal construction and ending with module draught consolidation. This module is considered a draught because it has yet to be proven valid and reliable. This draught module will proceed to the second development stage, testing and evaluating. In developing REBTGCM, the researcher combined the theoretical approach of REBT, the Sidek Module Construction Model, and the technique of group counseling sessions, which are combined to explain the theoretical framework of how this module works and is seen as a comprehensive picture. The application of REBT techniques is coordinated with the activities of the module. According to Ellis et al (2010) the REBT technique is an organized technique that can be adapted to various approaches such as psychoeducation, teaching, and any information needed for the client in the session.

Based on the researcher's needs study, 95.9% of 125 samples of psychological officers, school counselors, and counseling practitioners agreed that a specific module for adolescent smokers should be developed. Not only that, a cross-sampling needs study reported that 93.6% of 64 samples of teenage smokers agreed that smoking dependence could be managed through counseling techniques, increasing knowledge of quitting techniques, and increasing willingness to quit smoking. As a result, the development of this counseling therapy module is seen as having the potential to help smokers gain the sense to quit. This module incorporates psycho-education into its design so that the recovery process is comprehensive. REBTGCM specifies eleven meeting sessions and nineteen activities based on six levels of development. Froggatt (2005), the REBT approach has six levels of development: building relationships, interpreting problems (individuals and situations), preparing clients for therapy, conducting treatment, organizing support strategies, and evaluating and terminating the treatment. The content of REBTGCM is meticulously organized according to these six stages of development so that the structured process can influence the treatment procedure.

REBTGCM Validation Process

REBTGCM's validity is to collect information regarding the module's intended content. The module's validity is deemed adequate if all of its contents can be precisely measured (Noah & Ahmad, 2005). Expert evaluation can be used to obtain expert feedback and perspectives on the validity of testing tools or modules (Kamaluddin & Sulaiman, 2019). In this study, a panel of experts assessed the content validity of the REBTGCM by looking at the group's content and application as a whole. According to Russell's (1974) view, two methods have been used to test the validity of the module: (i) validation based on five statements of validity of the module as a whole and (ii) validity in terms of the division of constructs (sessions) and sub-constructs (activities in sessions).

A panel of experts will examine, evaluate, and comment on a complete copy of the REBTGCM and a set of content validity questionnaires provided by the researcher. The panel was given a set of content validity questionnaires based on modified versions of Russell's (1974) views to determine the content level of the REBTGCM. The evaluation scale consists of points from (1) strongly disagree to (10) strongly agree. Russell (1974) established module validity items based on five factors: a) Module content meets the target population; b)

Module content can be perfectly implemented; c) Module content corresponds to the allotted time; d) Module content can improve individual achievement performance in a positive direction, and e) Module content can assist smokers in avoiding cigarette dependence.

As respondents, eight experts were chosen to assess the construct's validity and the module's content. Following the module's suitability, the expert group consists of individuals with specialized knowledge and experience. The following are the criteria for selecting experts: (i) expertise in module construction, (ii) practitioners in the fields of psychology and counseling, and (iii) experience in the field of substance abuse. The profile of the expert panel is shown in Table 1:

Table 1

Expert Validity Panel Profile

No	Brief Profile	Institution	Expertise
1	Prof. Dr. (University Lecturer)	Universiti Pendidikan Sultan Idris, Malaysia	Module Development, Counseling
2	Associate Prof. Dr. (University Lecturer)	Universiti Pendidikan Sultan Idris, Malaysia	Module Development, Counseling
3	Dr. (University Lecturer)	Universiti Pendidikan Sultan Idris, Malaysia	Module Development, Counseling
4	Dr. (University Lecturer)	Universiti Sains Malaysia	Module Development, Counseling
5	Dr. (University Lecturer)	Universiti Utara Malaysia	Module Development, Counseling
6	Dr. (University Lecturer)	Universiti Malaysia Sabah	Substance Abuse, Counseling
7	Dr. (School Counselor)	Sekolah Menengah Kebangsaan	Module Development, Counseling Practitioner
8	Psychology Officer	Hospital	Counseling Practitioner

REBTGCM Reliability Process

The reliability of REBTGCM is determined by collecting data to determine the module's consistency. When the same score is obtained from the same individual at different times, the test's reliability is high (Noah, 2002). The reliability of a module can be determined by the extent to which study participants can comprehend the module's material (Rusell, 1974).

As suggested by Ahmad (2008); Noah and Ahmad (2005), the researcher created items for this study to determine the reliability of REBTGCM based on the objectives of each activity found in this module. A total of 36 question items were developed based on the objectives of the REBTGCM's eleven sessions'. According to Noah and Ahmad (2005), the purpose of developing this questionnaire item was to assess the sample's ability to comprehend and achieve a module-described objective.

A survey of adolescent smokers aged 18 to 25 who were also students at a Skills Education Institution in Perak was used to determine the reliability of the REBTGCM. The sample used to assess the reliability of the REBTGCM consisted of 30 students in their second

and third semesters. The sample was selected using purposive sampling. Kerlinger (2009) the number of subjects is a small proportion of the population to be studied and satisfies the statistical requirements for testing the reliability of a test instrument.

The Cronbach's Alpha coefficient was used to assess the reliability of REBTGCM. The data were analyzed with SPSS (Statistical Package for the Social Sciences). A close alpha coefficient of 1.00 indicates that the scale's items measure the same thing and that the item is highly reliable (Cohen, 1988). According to Kerlinger (2009), if the obtained reliability value is at least 0.60, this module has a high level of consistency. In contrast, if the reliability value is less than 0.60, the module is underperforming and should be improved.

Finding

Validity of REBTGCM

The module validity study conducted by experts is discussed and it is based on a modified version of Russell's (1974) module content validity questionnaire to determine the content level of the REBTGCM. Table 2 shows the validity value determined by an expert evaluation of the entire content of REBTGCM.

Table 2

Content validity value based on expert evaluation

Statements related to the assessed REBTGCM	Percentage	Expert Evaluation
The content of the module meets its target population	87.50	Accepted
The content of the module can be implemented perfectly	83.75	Accepted
The content of the module corresponds to the time allocated	82.50	Accepted
Module content can improve individual achievement performance in a more positive direction	86.25	Accepted
The content of the module is able to help smokers avoid dependence on cigarettes	82.50	Accepted

The percentage values for the validity of the module, as determined by the expert panel, are presented in Table 2. The content validity of REBTGCM is greater than 80%, with a minimum score of 82.50 percent and a maximum score of 87.50 percent. Table 3 summarises the expert validity findings based on sessions and activities:

Table 3

Validity value according to REBTGCM activities based on expert evaluation

Level	Activity	Percentage	Expert Evaluation
1 Level 1 Build rapport	Activity 1: Name chain	90.00	Accepted
	Activity 2: Getting to know yourself	86.25	Accepted
	Activity 3: Building group ethics	90.00	Accepted

2	Level 2 Interpreting the Problem	Activity 4:	85.00	Accepted
		My smoking experience		
		Activity 5:	82.50	Accepted
		Me and cigarettes		
3	Level 3 Providing Group Experts for the Therapy Process	Activity 6:	87.50	Accepted
		Identifying REBT (Phases A, B, C)		
		Activity 7:	86.25	Accepted
		Analyzing irrational beliefs and impact on yourself		
4	Level 4 Implement the First Treatment Program	Activity 8:	85.00	Accepted
		Analysis of smoking irrational beliefs and the effects		
		Activity 9:	88.75	Accepted
		Analysis of smoking irrational beliefs and effects through case studies		
5	Level 4 Implement the Second Treatment Program	Activity 10:	85.00	Accepted
		Challenging smokers' irrational belief systems (smoking dangers note)		
		Activity 11:	86.25	Accepted
		Purification of smokers' irrational beliefs		
		Activity 12:	86.25	Accepted
		Purification of smokers' irrational beliefs through case studies		
6	Level 5 Organize First Support Strategies	Activity 13:	83.75	Accepted
		Smoking cessation guide		
		Activity 14:	86.25	Accepted
		Managing withdrawal symptoms		
		Activity 15:	86.25	Accepted
		Relaxation techniques		
7	Level 5 Organize a Second Support Strategy	Activity 16:	82.50	Accepted
		Stress and anxiety management		

		Activity 17: Self-assertive management	85.00	Accepted
8	Level 6 Formulation and Termination	Activity 18: Reinforcement through self -imagination and role playing	87.50	Accepted
		Activity 19: Formulation and planning for the future of smoke - free	85.00	Accepted
Overall Mean			86.05	Accepted

The expert evaluation of REBTGCM activities and sessions is shown in Table 3. The study results show that the total average validity score of the entire REBTGCM activity is 86.05%. The lowest percentage score was 82.50% on the activities "my smoking experience" and "stress and anxiety management." The highest percentage score in this validity is 90.00% at level 1 in the activity "name chain" and "building group ethics." Overall, the study findings show that REBTGCM meets the validity and is capable of process reliability.

Reliability of REBTGCM

The reliability of REBTGCM sessions and activities on adolescent smokers was determined using Cronbach's Alpha analysis, as shown in Table 4:

Table 4

REBTGCM reliability values for overall adolescent smokers

Module	α value
Rational Emotive Behavioral Therapy Group Counseling Module for Adolescent Smokers	.948

Table 4 shows the Cronbach's Alpha analysis results, which show that the reliability value for the entire REBTGCM is .948, which is greater than .60. Table 5 then shows the reliability coefficient value for each session of the REBTGCM for adolescent smokers.

Table 5

Reliability values of REBTGCM for adolescent smokers based on session

Sessions/Activities	α value
Session 1: Building Relationships	.846
Session 2: Interpreting Problems (First Strategy)	.851
Session 3: Interpreting Problems (Second Strategy)	.764
Session 4: Preparing Group Experts for the Therapy Process	.800
Session 5: Implementing a Treatment Program (First Strategy)	.923
Session 6: Implementing a Treatment Program (Second Strategy)	.792
Session 7: Implementing Treatment Program (Third Strategy)	.848
Session 8: Organizing Support Strategies (First Strategy)	.845
Session 9: Organizing Support Strategies (Second Strategy)	.740

Session 10: Organizing Support Strategies (Third Strategy)	.790
Session 11: Summary and Conclusion	.767

According to this study, the minimum reliability value for REBTGCM is .740 for the 9th session (Organizing the Second Support Strategy), and the maximum reliability value is .923 for the 5th session (Implementing the First Treatment Program). This is consistent with Kerlinger's (2009) belief that a module with a minimum value of .60 is considered good. As a result of the findings, REBTGCM is considered acceptable and has a high-reliability value. Therefore, REBTGCM for adolescent smokers has the potential to be used.

Discussion

The purpose of this study is to evaluate the validity and reliability of the REBTGCM. Two validity tests were carried out in this study: (i) Validation based on the five validity statements of the module as a whole; and (ii) Validity in terms of the division of constructs (sessions) and sub-constructs (activities in sessions). Noah and Ahmad (2005), a measuring tool has the same meaning as a module. As a result, testing the module's validity and reliability is required before it can be used. The validity of a module describes the extent to which the results should be achieved. This means that the module must have a goal that the researcher wishes to accomplish. Reliability also describes the degree to which the module's implementation has a consistent value from the same individual, even at different times (Noah, 2002).

Expert content validity findings revealed that the REBTGCM content meets the appropriate module content characteristics, is appropriate for the target population, and meets the objectives outlined and the appropriate time allocation. The study's findings show that REBTGCM received a content validity score of 70%, as suggested by Tuckman (1998), and was considered to have mastered and achieved the goal of building a module. This validity test also enables the researcher to identify and correct any flaws in the developed module (Noah & Ahmad, 2005). This procedure aims to produce a high-quality module while also benefiting the subjects that will follow it. Previous researchers used the same method to investigate the validity of module content (Idris & Shaari, 2017; Md Zahir et al., 2019)

Previous researchers' perspectives on determining the reliability value of Cronbach's Alpha coefficient differ in terms of the module's reliability. Kerlinger (2009), the minimum level of Cronbach's Alpha reliability is .60. Still, according to Noah (2005), Frankel and Wallen (2012); Kline (2005), the accepted reliability coefficient value is .70. Nonetheless, the results of the study show that REBTGCM has a Cronbach's Alpha reliability value of .70 or higher. This explains why the items in the question to assess the implementation of REBTGCM are consistent. Previous researchers, including Tengku Besar et al (2021); Zahir et al (2019), used the same method to determine the module's reliability value above the .60 levels. Reliability tests are required to ensure that a measurement tool consistently produces equivalent results (Abdullah, 1990). This equivalence is determined by using the tool on a variety of subjects repeatedly. As a result, module reliability is important to ensure that the module to be used is appropriate and consistent before it is used (Noah, 2002). The reliability study on REBTGCM has given the impression that this module is appropriate for adolescent smokers.

As a result of a study on the validity and reliability of REBTGCM, this is an alternative treatment that can improve teenage smokers' cognitive, emotional, and behavioral well-

being. Layoun et al (2017) strongly concur that adolescent smokers must seek therapy for early to avoid dependence and addiction as adults. Bashirin et al (2020) adolescent smokers should be educated about the dangers of smoking and immediately treated so that this group is more motivated to boost their willingness to quit smoking. DiClemente and Prochaska (1982) agree that smokers should see to in order to boost their drive to stop and strengthen the phases of contemplation, action, and maintenance.

Conclusion

Overall, REBTGCM is a new tool that counselors can use to help smokers manage their smoking habits. REBTGCM may help smokers identify issues that trigger their behavior, identify existing irrational beliefs, and understanding the consequences of those irrational beliefs. Furthermore, REBTGCM is a treatment that challenges smokers' irrational beliefs, identifies new effects of more rational beliefs, and manages positive cognitive, emotional, and behavioral maintenance plans. This is consistent with the theory outlined by (Ellis and Bernard, 1985; Froggatt, 2005).

REBTGCM validity testing is required to ensure that this module achieves its objectives. According to the study's findings, the content validity of REBTGCM as assessed by experts is .86. Furthermore, the study's findings show that REBTGCM has a Cronbach's Alpha of .948. This demonstrates how consistent this module is. REBTGCM is regarded as a novel contribution to Malaysian counseling practitioners, and it is hoped that it will be used by counselors to assist adolescent smokers in overcoming the problem of cigarette addiction, thereby raising awareness of the need to quit smoking. Furthermore, this REBTGCM has the potential to be used in educational institutions such as schools, colleges, or universities to assist administrators in managing the issue of smoking behavior. REBTGCM can be used as one of the mediums of intervention and therapy for smoking cessation programs in schools through guidance and counseling services in educational institutions. With this endeavor, the government can contribute to attempts to reduce the problem of smoking behavior among youths, which is becoming increasingly frequent. This REBTGGCM validity and reliability research serves as a benchmark to ensure that a module that is to be deployed meets requirements in the field of research before it is fully utilized later.

Reference

- Abdullah, S. (1990). *Panduan amali untuk penyelidikan pendidikan*. Kuala Lumpur: Kementerian Pendidikan Malaysia
- Ahmad, J. (2008). *Modul dan pengendalian bimbingan kelompok*. Serdang: Penerbit Universiti Putra Malaysia.
- Andrea, C. V., Julia, C. W., Elias, M. K., Amanda, L. G., Darren, M., Robin, J. M., & Stephen T. H. (2020). Smoking-cessation interventions for U.S. young adults: updated systematic review. *Am J Prev Med* 2020;000(000):1–14.
- Ball, J., Sim, D., & Edwards, R. (2018). Why has adolescent smoking declined dramatically? Trend analysis using repeat cross-sectional data from New Zealand 2002–2015. *BMJ Open* 2018;8: e020320. doi:10.1136/bmjopen-2017-020320.
- Bashirian, S., Barati, M., Karami, M., Hamzeh, B., & Ezat, E. (2020). Predictor of shisha smoking among adolescent females in Western Iran in 2019: using the Prototype-Willingness Model. *Tob. Pre. Cessation* 2020; 6 (August);50.

- Bishop, M. F. (2019). REBT and Addictions. In W. Dryden & M. E. Bernard (eds.), *REBT with diverse client problems and populations* (pp. 103-125). US: Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-02723-0_6.
- Chinwong, D., Mookmanee, N., Chongpornchai, J., & Chinwong, S. (2018). A comparison of gender differences in smoking behaviors, intention to quit, and nicotine dependence among Thai university students. *Journal of Addiction*, Volume 2018, Article ID 8081670, 8 pages.
- Choi, D., Ota, S., & Watanuki, S. (2015). Does cigarette smoking relieve stress? Evidence from the event-related potential (ERP). *International Journal of Psychophysiology* 98 (2015) 470–476.
- Coban, F. R., Kunst, A. E., Van Stralen, M. M., Richter, M., Rathmann, K., Perelman, J., & Alves, J., Federico, B. (2018). Nicotine dependence among adolescents in the European Union: How many and who are affected? *Journal of Public Health*. pp. 1–9. doi:10.1093/pubmed/fdy136.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Corey, G. (2016). *Theory and practice in group counseling. (9th ed.) version 2*. USA: Cengage Learning, Inc.
- DiClemente, C. C., & Prochaska, J. O. (1982). Self-change and therapy change of smoking behavior: A comparison of processes of change in cessation and maintenance. *Addictive Behaviors*, 7, 133-142.
- Dryden, W., & Neenan, M. (2011). *Rational Emotive Behaviour Therapy in a nutshell*. London, UK: Sage Publication Ltd.
- Ellis, A., & Bernard, E. F. (1985). *Clinical applications of Rational-Emotive Therapy*. New York: Plenum Press.
- Ellis, A. (1995). Changing Rational-Emotive Therapy (RET) to Rational Emotive Behavior Therapy (REBT). *Behavior Therapist*, 16, 257-258.
- Ellis, A. (2003). The relationship of Rational Emotive Behavior Therapy (REBT) to social psychology. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, Vol. 21, No. 1, Spring 2003.
- Ellis, A., David, D., & Lynn, s. J. (2010). *Rational and irrational belief. Research, theory, and clinical practice*. New York: Oxford University Press Inc.
- Erikson, E. H. (1994). *Identity youth and crisis*. New York: Norton & Company.
- Ern, T. S., & Yaacob, N. R. (2017). Disputing irrational beliefs technique to develop female adolescent self-esteem. *Pertanika J. Soc. Sci. & Hum.* 25 (S): 181 - 192 (2017).
- Fagerstrom, K. O. (1982). Effects of a nicotine-enriched cigarette on nicotine titration, daily cigarette consumption, and levels of carbon monoxide, cotinine, and nicotine. *Psychopharmacology (Berl)*. 1982;77(2):164-167.
- Fauziah, D. M. (2016). *Bimbingan Konseling Rational Emotif Behaviour Therapy teknik homework assignment dalam meningkatkan kepercayaan diri siswa korban bullying di SMP negeri 3 terbanga besar tahun ajaran 2016/2017*. Institut Agama Islam Negeri (IAIN) Raden Intan Lampung.
- Folan, P., Spatarella, A., Jacobsen, D., & Farber, H. J. (2017). Why do i smoke and why do i keep smoking? *Am J Respir Crit Care Med Vol.* 196, P7-P8, 2017.
- Fraenkel, J. P., & Wallen, E. W. (2012). *How to design and evaluate research in education*. Boston, MA: McGraw-Hill.

- Froggatt, W. (2005). *A brief introduction to Rational Emotive Behaviour Therapy*. New Zealand: Harper Collin Publishers.
- Glover, E. D., Nilsson, F., Westin, A., Penny, N., Glover, Molly, T. L., & Persson, B. (2005). Developmental history of the Glover-Nilsson smoking behavioral questionnaire. *Am J Health Behav*. Sep-Oct 2005;29(5):443-455.
- Grapatsas, K., Tsilogianni, Z., Leivaditis, V., Dimopoulos, E., Zarogoulidis, P., Karapantzos, I., Tsiouda, T., Barbetakis, N., Paliouras, D., Chatzinikolaou, F., Trakada, G., & Skouras, V. (2017). Smoking habit of children and adolescents: an overview. *Ann Res Hosp* 2017;1:26. doi: 10.21037/arh.2017.05.01.
- Gulsen, A., & Uygur, B. (2018). Psychological features of smokers. *Respiratory Care Paper in Press*. Published on July 31, 2018, as DOI: 10.4187/respcare.06287.
- Harvey, J., & Chadi, N. (2016). Preventing smoking in children and adolescents: Recommendations for practice and policy. *Paediatr Child Health Vol 21 No 4 May 2016*.
- Shaari, H. A. A. (2021). People in recovery from substance use disorders: What motivates them to enter addiction treatment agencies as Counselors?. *Pertanika J. Soc. Sci. & Hum*. 29 (4): 2315 - 2334 (2021).
- Hiemstra, M., De Leeuw, R. N., Engels, R. C., & Otten, R. (2017). What parents can do to keep their children from smoking: a systematic review on smoking-specific parenting strategies and smoking onset. *Addict Behav* 70:107–128.
- Idris, A., & Shaari, A. (2017). Pembinaan, kesahan dan kebolehppercayaan Modul Bimbingan Terapi Realiti Teori Pilihan. *Jurnal Pembangunan Sosial Jilid 20: 77–8*. 2017.
- Ilechukwu, L. C., Egenti, N. T., Aloh, H. E., Uwakwe, R. C., Ogbuinya, N. O., Eke, C. L., Kalu, I. A., Ejionueme, L. K., & Iremeka, F. U. (2021). Rational Emotive Education for reducing stress of undergraduate students of religious education program. *Medicine (2021)* 100:23.
- Ismail, A. (2017). *Kaunseling kelompok: Proses, kemahiran dan isu*. Negeri Sembilan: Penerbitan USIM.
- Jogdand, A. M. (2018). The Effect of Rational Emotive Behaviour Therapy on obsessive compulsive disorder among nicotine addict youth. *International Journal of Indian Psychology*, Vol. 6, (1), DIP: 18.01.089/20180601, DOI: 10.25215/0601.089.
- Kamaluddin, M. R., & Sulaiman, W. S. (2019). *Teknik kesahan dan kebolehppercayaan alat ujian psikologi*. Bangi: Penerbit Univuersiti Kebangsaan Malaysia.
- Kerlinger, F. N. (2009). *Foundation of behavioral research (8th edition)*. New York: Holth, Rinehart & Winston.
- Khalid, N. F. (2017). *Kesan kaunseling kelompok perkembangan dan rawatan terhadap konsep sendiri, resilien dan daya tindak pelajar SMKA*. Tesis Ph.D. Universiti Pendidikan Sultan.
- Kline, T. J. B. (2005). *Psychological testing a practical approach to design and evaluation*. United State of America: Sage Publications Ltd.
- Kuang, H. L., Hui, L. L., Chien, H. T., Chee, C. K., Yi, Y. K., Ganapathy, S. S., Miaw, Y. J., Ghazali, S. M., & Eng, O. T. (2017). Smoking among school-going adolescents in selected secondary schools in Peninsular Malaysia- findings from the Malaysian Adolescent Health Risk Behaviour (MyaHRB) study. *Tobacco Induced Diseases* (2017) 15:9.
- Kurniawat, D. A., & Basuki, A. (2019). Implementation of REBT for drug addicts: meta-analysis. *Advances in Social Science, Education and Humanities Research, volume 462*. Proceedings of the 2nd International Seminar on Guidance and Counseling 2019 (ISGC 2019).

- Layoun, N., Salameh, P., Waked, M., Bacha, A., Zeenny, R. M., Hitti, E., Godin, I., & Dramaix, M. (2017). Motivation to quit smoking and acceptability of shocking warnings on cigarette packages in Lebanon. *Patient Preference and Adherence* 2017:11 331–342.
- Mahfar, M., & Senin, A. A. (2015). Managing stress at workplace using the Rational-Emotive Behavioral Therapy (REBT) approach. *International Conference on Human Resource Development 2015*.
- Martin, J. T. (2016). Rational Emotive Behavior Therapy (REBT), Rational Emotive Behavior Therapy (REBT), irrational and rational beliefs, and the mental health of athletes. *Front. Psychol.* 7:1423. doi: 10.3389/fpsyg.2016.01423.
- Martinez, U., Martinez, V., Simmons, V. N., Meltzer, L. R., Drobos, D. J., Brandon, K. O., Palmer, M., Eissenberg, T., Bullen. C. R., Harrell, P. T., & Brandon, T. H. (2019). How does smoking and nicotine dependence change after onset of vaping? a retrospective analysis of dual users. *Nicotine and Tobacco* 2019.
- Mat, A., & Jaafar, W. M. (2022). Kesan Modul Terapi Rasional Emotif Tingkah Laku (REBT) terhadap sistem kepercayaan dan estim sendiri dalam kalangan pelatih di Sekolah Tunas Bakti. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, Volume 7, Issue 1 (page 50-58) 2022. DOI: <https://doi.org/10.47405/mjssh.v7i1.1215>.
- Zahir, M. Z., Saper, M. N., & Bistamam, M. N. (2019). Kesahan dan Kebolehppercayaan Modul Kelompok Bimbingan Integrasi REBT-Tazkiyah An-Nafs. *Journal of Research, Policy & Practice of Teachers & Teacher Education* (ISSN 2232-0458/ e-ISSN 2550-1771) Vol. 9, No. 1, June 2019, 58-69.
- Ministry of Health Malaysia. (2017). *National Health & Morbidity Survey (NHMS) (2017)* Putrajaya: Ministry of Health Malaysia.
- Ministry of Health Malaysia. (2019). *Pharmacotherapy guidelines for smoking cessation*. Selangor: Pharmacy Services Program, Ministry of Health Malaysia.
- Kamaluddin, M. R., & Sulaiman, W. S. W. (2019). *Teknik kesahan dan kebolehppercayaan alat ujian psikologi*. Bangi: Penerbit Univuersiti Kebangsaan Malaysia.
- Mourik, D. A., Gera, E. N., Willemsen, M. C., Putte, B., & Vries, D. (2020). Differences in smokers' awareness of the health risks of smoking before and after introducing pictorial tobacco health warnings: findings from the 2012–2017 international tobacco control (ITC) Netherlands surveys. *BMC Public Health* (2020) 20:512. <https://doi.org/10.1186/s12889-020-08667-9>.
- Noah, S. M. (2002). *Reka bentuk penyelidikan*. Serdang: Institut Pendidikan dan Penyelidikan Jauh (IDEAL). Serdang: Universiti Putra Malaysia.
- Noah, S. M., & Ahmad, J. (2005). *Pembinaan Modul: Bagaimana Membina Modul Latihan dan Modul Akademik*. Serdang: Universiti Putra Malaysia.
- Orcullo, D. J., & Teo, H. S. (2016). Understanding cognitive dissonance in smoking behaviour: A qualitative study. *International Journal of Social Science and Humanity*, Vol. 6, No. 6, June 2016.
- Ren, L., Cui, L. B., Chen, C., Dong, X., Wu, Z., Wang, Y., & Yang, Q. (2019). The implicit beliefs and implicit behavioral tendencies towards smoking-related cues among Chinese male smokers and non-smokers. *BMC Public Health* (2019) 19:1000.
- Russell, J. D. (1974). *Modular instruction: A guide to the design, selection, utilization, and evaluation of modular material*. New York: Publishing Company.
- Suhanyi, L., Gavurova, B., Ivankova, V., & Rigelsky, M. (2020). Smoking behaviour of university students: a descriptive study. *Adiktologie*, 20(1–2), 57–63; doi 10.35198/01-2020-001-0009.

- Besar, T. N., Ahmad, N. S., & Hashim, S. (2021). Kesahan dan kebolehppercayaan Modul Kaunseling *SoF-Ea (Solution Focused Brief -Expressive Arts)* terhadap penyesuaian pelajar di Institut Pendidikan Guru (IPG). *Journal of Educational Research & Indigenous Studies Volume: 3* (2021).
- Tuckman, W. B. (1998). Using tests as an incentive to motivate procrastinators to study. *The Journal of Experimental Education, 66:2*, 141-147, DOI: 10.1080/00220979809601400.
- Unubol, H., & Sayar, G. H. (2019). Psychological factors associated with smoking and quitting: addiction map of Turkey study. *Neuropsychiatric Disease and Treatment 2019:15*. doi: 10.2147/NDT.S204167.
- U.S. Department of Health & Human Services. (2019). *Reducing tobacco use: a report of the surgeon general*. Atlanta: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- Vajravelu, H. R., Gnanadurai, T. R., Krishnan, P., & Ayyavoo, S. (2015). Impact of quantified smoking status on cognition in young adults. *Journal of Clinical and Diagnostic Research. 2015 Dec, Vol-9(12): CC01-CC03*
- World Health Organization. (2009). *WHO Report on The Global Tobacco Epidemic, Implementing Smoke-Free Environment*. Geneva: World Health Organization.
- World Health Organization. (2019). *WHO Report on The Global Tobacco Epidemic, 2019* Geneva: World Health Organization.
- Xu, L., & Liu, H. (2017). Effects of Rational Emotive Behavior Therapy (REBT) intervention program on mental health in female college students. *Neuro Quantology 2017; 15, 4:156-161*.
- Yahaya, M., Akhir, M. N., & Sulaiman, M. N. (2018). Faktor tingkah laku merokok dalam kalangan mahasiswa Universiti. *Jurnal Personalia Pelajar 21(2): 37-44*.
- Zaborskis, A., & Sirvyte, D. (2015). Familial determinants of current smoking among adolescents of Lithuania: a cross-sectional survey 2014. *BMC Public Health 15:889*.
- Zoe, T. M., Kathryn, R. K., Pamela, S. S., Christine, A. H., Martha, J. B., Paul, A. D., Kenneth, R., Christie, A. F., Crystal, D. M., Clara, R. M., Judith, J. P., Timothy, K. T., & Christi, A. P. (2021). Developing a Social Media Intervention to connect Alaska Native People who smoke with resources and support to quit smoking: the connecting Alaska native quit study. *Nicotine & Tobacco Research, 2021, 1002–1009* doi:10.1093/ntr/ntaa253.
- Zvolensky, M. J., Jardin, C., Wall, M. M, Gbedemah, M., Hasin, D., Shankman, S. A., Gallagher, Bakhshaie, M. W. J., & Goodwin, R. D. (2018). Psychological distress among smokers in the United States: 2008–2014. *Nicotine & Tobacco Research, 2018, 707–713*doi:10.1093/ntr/ntx099.