

**DEVELOPING, VALIDITY AND RELIABILITY OF A DRUG ADDICTION  
MODULE AMONG DRUG ADDICTS WHO ARE UNDERGOING  
TREATMENT AT REHABILITATION CENTRES**

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**Abstract**

The aim of this study is to develop a module, to determine the validity and reliability of a drug addiction module among drug addicts (inmates) who are undergoing treatment at rehabilitation centers organized by National Anti Drug Addict Agency (AADK), Ministry of Home Affairs, Malaysia. The design of this study is the descriptive approach. The nineteen subjects involved to develop this module are an officer from the Selangor Education Department, nine officers and nine school counselors representing each District Education Office in Selangor. Two module experts were given the module to determine the validity of the module. They were required to respond to the questionnaires on validity as developed by Russell (1974). Thirty drug addicts from the Drug Rehabilitation Centre were requested to undergo all the modules and respond to the questionnaires on reliability developed by Jamaludin Ahmad (2007). The descriptive findings reveal that the module has high content of validity and high value of Alpha Cronbach reliability. Based on the research findings, several recommendations are suggested.

**Key Words:** rehabilitation centers, drug addiction module, developing, validity, reliability

## **INTRODUCTION**

On 28 February, 1983, the National Anti Drug Cabinet Committee declared that Drugs are the number one enemy of the country. The abuse of drugs has grown widespread with newer drugs, that has arrested the attention of all communities both locally and abroad. The abuse has become cancerous to all without borders in every part of the country. The abuse of drugs has become acute which knows no boundaries in affecting the old, adults, teenagers and ever school children. With the introduction of synthetic drugs, these victims have become even worse. In other words, teenagers and children are continuously exposed to drugs and are at a greater risk to be involved.

The National Anti Drug Agency reports that until 2004, there were 195,893 people convicted on drug related offences and were sent too drug rehabilitation centers nationwide too attend treatment and rehabilitation programmes. The government has spent RM 867 million towards the rehabilitation effort, which has become the main concern and fear to all especially parents. The above figures clearly indicate the vast problem created by the drug abuse menace in the country. The onus is on the parents guide and steer their children away from drug abuse. The leaders of this nation are also obligated to free the people from being involved in the abuse of drugs.

## **STATEMENT OF PROBLEM**

The federal government under the leadership of the honourable Dato' Seri Haji Abdullah Ahmad Badawi had launched various strategies in the effort to abolish the abuse of drugs. Dato' Seri, being the Home Minister has established a new body called the National Anti Drug Agency (AADK), especially to address drug abuse related matters. The federal government has further targeted to have a drug free society by the year 2015.

AADK has introduced various activities in combating this drug abuse menace by educating the public and creating public awareness on the dangers of drug abuse. It further targets schools, being the important institution and works closely with the school authorities in tackling this menace at school level. The Malaysian Ministry of Education is always sensitive towards these effort and takes the onus in the successful implementations of these programmes through the curriculum and co-curriculum activities. Hence, the Ministry of Education has set a target date of 2012 as the year that all schools would be drug free. Drug abuse is still at a very worrying state even after the implementation of various programmes by the government via AADK, schools and other parties. The targeted year 2015 is only 8 years away. The question is: will we achieve our target by the year 2015? And the target of drug free schools by 2012?

Therefore, this research aims to build a special drug rehabilitation module for the drug abusers at the rehabilitation centers. It further aims to justify the content validity and reliability of the module that has been developed. In general, this research attempts to answer the following main questions: (1) What are the methodologies used in developing the special module on drug rehabilitation?; (2) Does the proposed rehabilitation module have good content validity?; (3) Does the proposed special rehabilitation module have the highest reliability?

## **METHODOLOGY**

This research attempts to evaluate the degree of validity and reliability of the drug rehabilitation module, while identifying the development methods. A descriptive research design is used to achieve the above objectives. Mohd Majid Konting (2004) has said that the descriptive research is the way to explain an on going phenomenon or too explore any field that is yet to be researched or less researched. Sidek Mohd Noah (2000) clarifies that a descriptive research is conducted to prove a systematic explanation of facts of a population or of an interested field in an accurate manner. Hence the descriptive research design is the apt and appropriate design that justifies the content validity and reliability of drug rehabilitation module. This is due to lack of research or less research done on the content validity and reliability of the module. Indirectly, this research design is the most appropriate design to answer all the three research questions.

The study involves special drug officers who are directly involved in drug abuse, module specialists and drug addicts who are undergoing treatment at rehabilitation centres. About 19 officers were involved in designing this drug rehabilitation module. They comprise of a special officer for drug abuse from the Selangor Education Department, 9 special officers for drug abuse from the District Education Office in Selangor and 9 school counselors representing each District Education Office in Selangor. In order to prove the content validity of the drug rehabilitation module, two module specialists: a specialist from Universiti Teknologi Malaysia, Skudai, Johor and a commandant from the Dengkil Serenti Centre, Sepang, Selangor. To obtain the reliability of the drug rehabilitation module, a total of 30 drug addicts who are undergoing treatment at the Dengkil Serenti Center, Sepang, Selangor were selected. The views provided by Rusell (1974) and Mohd Majid Konting (2004) were taken into consideration in determining the size of the sample for this research.

The related research for the drug rehabilitation module was conducted at Universiti Putra Malaysia. To investigate the content validity of the module, Universiti Teknologi Malaysia, Skudai, Johor and Serenti Dengkil Center, Sepang were the

venues. Meanwhile Dengkil Serenti Center, Sepang, Selangor was the chosen venue to conduct the research related to the reliability of the drug rehabilitation module. The related research for the drug rehabilitation module was based on the model introduced by Rusell (1974). The research related to the content validity for the drug rehabilitation module was also based on the views put forth by Rusell (1974) but was adapted by Jamaludin Ahmad (2002). To test the reliability of this module, a questionnaire was built based on the views of Sidek Mohd Noah and Jamaludin Ahmad (2005). This means that there were two questionnaires used in this research but only one model was utilized in constructing the drug rehabilitation module.

Eventhough a lot of data and informations have been gathered from this research, it only focuses on the data which has relevance to motive of the research. The first and second objectives of this research have quantitative traits and has been analysed in a quantitative method. Meanwhile, all the data relevant to the third motive has been analysed using Pearson Correlation (r) statistic. To ensure easier calculation accuracy, the computer program The Statistical Package for The Social Science (SPSS/PC+) (Norusis & SPSS, 1993) has been utilized. The sub-program that has been used was Reliability alpha model sub-program.

## **FINDINGS AND DISCUSSION**

### **Methods of Developing A Special Drug Rehabilitation Module**

Rusell (1974) has set guidelines which have to be followed when developing a particular module. These guidelines have been observed during the development of the special module of drug rehabilitation. Rusell (1974) stated that a target has to be identified before a module is developed. This is because the target of the module are the drug addicts who are undergoing treatment, and this is appropriate with the view. Apart from that, Rusell (1974) stated that the module builder has to understand the objectives to develop such a module. This has been taken into consideration by researcher to help the drug addicts who are still receiving treatment to ensure they realize and repent on the danger of drugs and do not repeat ill-social activity and to make themselves not to go back to their old habits.

Rusell (1974) had also has stated that each module must have test items and recognize students achievement level. In this special module for drug addicts, the activities require the facilitators to ask various questions, give instructions and explanations. The participants will be able to show their achievement level, ability and their capability while they carrying out the activities found in the module. Rusell (1974) has also cited that the modules have to be arranged in order and appropriate tools are required. This module has been developed thoroughly from all aspects which

includes the steps of conducting the activities, the suitability of the tools with the involvement of the 19 special drug officers to get their view of this module. In the development of the module, Rusell (1974) believes that module has implemented on the target audience to get the feedback on the strength and the weaknesses of the module. This has also be done by the researcher by conducting on the drug addicts who are receiving treatment at the rehabilitation centres.

Further on, Rusell (1974) cites that before any module can be used, it has to determine its validity and reliability. This can also be done in this special module with the involvement of module experts to get their view especially regarding content validity. Apart from that, the reliability of the module has be done. In conclusion, it is certified that this module has observed all the guidelines set by Rusell (1974) and indirectly this module can be used as the appropriate module for drug addicts who are undergoing treatment. There are several modules used as guideline to achieve a certain high level module which gives a positive impact to the users. Rusell (1974) has introduced a creative module model by outlining certain procedure that need to be followed by the module writers and researchers. To create a first class module the above facts has been accepted.

Rusell (1974) has stated that this module can be applied in many ways by individuals, groups, learning institution, non- learning institutions and is assured to bring positive changes to individuals. The motive of this module is to target activities at individuals and groups of non-academician drug addicts who are under treatment. Based on Rusell (1974) we can develop a module for individual suitable not only for students but also drug addicts. The module has been fine tuned based on the information and feedbacks received from the earlier research. The most important subject of developing module is the trying period of the module on the subject itself as stated by Rusell (1974). This trying period will determine the objective of the module. While in trial period, the writer of the module will obtain a lot of information such as errors in spelling, weak sentence construction, time adjustment, understanding of ongoing activity, appropriate of activity, appropriate of multimedia used and others. The above information obtained will be a guideline to the module writer to be used for the betterment and improvement of the module.

The level of achievement by the subjects has to be analyzed by the module writer as stated in Rusell (1974). To achieve every category (good, average and weak) it needs a variety of modules and indirectly the module has to take into account the capability, mentality and acceptability of the subject. The researcher has taken into consideration the view of module expert and drug addicts when the pioneer research was carried out. The special drug rehabilitation module was eventually achieved. One has to determine the objectives that has to be achieved before the process of module

writing as stated by Rusell (1974). In module writing it is advisable to restrict the objectives of character and behaviour to a maximum of three or four objectives. Based on activity module, this module also has three to four objectives. This means this special drug rehabilitation module has adhered to the procedure as stated by Rusell (1974). In short, the special drug rehabilitation module adhered all criteria as per the procedure of module writing as introduced by Rusell (1974).

### **The Validity and Reliability of The Special Drug Rehabilitation Module**

Russell's view will be referred for the validity of the special drug addicts treatment module. According to Russell (1974), a module has a good content validity when the module has the following conditions :

1. It covers the targeted population; which means the module has been developed in accordance with the background aspects and the behaviour of the subjects in the research.
2. The module has been implemented during a normal and satisfactory situation.
3. Time allocated to the individuals to complete the module was sufficient and appropriate.
4. The performance of the individual was enhanced after the completion of the module.
5. There was an attitude change towards betterment after the completion of the module.

With accordance to the validity content of Russell's module (1974), Jamaludin Ahmad (2002) has developed a questionnaire on content validity of the module. The experts were requested to confirm the validity content after going through the module in details. The final conclusion was that both the experts agreed to the validity content of the module. The high value of alpha Cronbach was achieved from the data obtained. The result obtained indicates a high value of .96 reliability of alpha Cronbach.

### ***The Validity Of The Special Drug Rehabilitation Module***

A module is said to be good when it has good content validity. This has been validated by Sidek Mohd Noah and Jamaludin Ahmad (2005) in order to have high content validity, a module has to have good instrument to measure the validity. As

such Jamaludin Ahmad (2002) questionnaires is used. These questionnaire paves the path to the expert to determine whether the said module is capable to measure and test that actually has to be measured and tested. The percentage used to determine whether this module contains high level of content validity, the views of Tuckman & Waheed (1981) and Abu Bakar Nordin (1995) has stated that degree of mastery or achievement is 70% or more as controlled or achieved the highest level of achievement. The above experts have given an evaluation of 70% to the above for the said modules.

The findings of the research on the content validity modules especially the drug rehabilitation shows the module has good content validity. Based on the view of Rusell (1974) which states the module has the good content validity when the module achieve the target population, a satisfactory environment and time limit, an enhanced achievement the module has a capability of changing individual's perspectives to a positive direction. The expert who has evaluated the content validity of this module has stated that this module has good content validity. As such this module has bypassed the given guidelines for the content validity of the module set by Rusell (1974). The modules can be utilized on the drug addicts who are on treatment at the rehabilitation centers.

#### ***The Reliability Of The Special Drug Rehabilitation Module***

According to Sidek Mohd Noah (2001), in general the method to determine the reliability of the module is similar to the test and instrument reliability. Both the module and the instrument are the special tools for this purpose. If the test reliability factors and the instruments are indicated indirectly through the items analyzed, then the same goes to the reliability factors of the module. In general, factors determining the reliability of the module is similar to the test reliability or the instruments that are not determined directly due to the abstract characteristics.

Jamaludin Ahmad and Sidek Mohd Noah (2001) cites that in determining the reliability of the module, two normal methods utilized are by questionnaires created based on the steps found in the activities or on the objectives of each activity module. Both these methods create a coefficient reliability of the module indirectly. Rusell (1974) claims that to test the reliability of a certain module, it must be taken into consideration the steps in each activity has been followed successfully by the students. Each steps of the activities in the module will determine the target of achieving the module objectives. The question items created are based on the steps of the module activities.

Meanwhile, Vale (1998) has suggested that in determining the coefficient reliability of the engineering module, the method used are through questionnaires

created based on the steps that are found in the engineering module. Research related to the reliability of the special drug rehabilitation module, item building method are based on the objectives of each activity found in the module. The findings prove that the module has a high coefficient reliability value of .96 and indirectly the module has consistency and able to measure what it is supposed to measure. There are no fixed standard found by local or abroad researchers in relation to the best coefficient reliability value. Mohd Majid Konting (2004) states the coefficient reliability value of an instrument should be at least .60. Fraenkel and Wallen (1996) claim that it should be at least .70 meanwhile Edward and Richard (1979) insist on a minimum of .80. This shows that the drug rehabilitation module has high reliability value of more than .80

## **RESEARCH IMPLICATIONS**

### ***Theoretical Implication***

A few theoretical implication could be found from the findings of this research. The research clearly shows that the special drug rehabilitation module has high content validity and reliability. The findings also contribute significantly to the development of knowledge especially in relation to psychometric quality. The findings of this study have revealed that the techniques in module building highlighted by Rusell (1974) is appropriate and can be implemented. It is clear that the procedures in module building as recommended by Rusell (1974) has been strictly followed by module builders during the process of building the special drug rehabilitation module.

The findings of the study also shows that the technique of the content validity factors of the module as highlighted by Rusell (1974) and adapted by Jamaludin Ahmad (2002) is appropriate and can be implemented. This proves that the content reliability of the questionnaires in the module has been fulfilled by the special drug rehabilitation module and also confirms the module has high content validity. From the aspects of reliability, it is clear that the special drug rehabilitation module has high reliability. If this module is seen from the aspect approach in determining the reliability of the module, the findings clearly shows that the reliability of questionnaires used is based on the objectives of the activities conducted in this module has a high coefficient reliability value.

### ***Practical Aspects***

This research has successfully proven that the special drug rehabilitation module has high validity and reliability. Thus, all the activities in the module are appropriate and highly recommended to be used as a tool, material, source and guide in



providing guidance, repentance, realization, self confidence and motivation to the drug addicts who are undergoing treatment which aims to a complete recovery level: physically, mentally, spiritually as well as intellectually. On the whole, this module serves as a tool, material, source to guide the increase rate of recovery among the addicts as well help the fascilitators who use it when they are appointed at the drug rehabilitation centers in the nation.

Besides that, this research also proves that the process of module building as recommended by Rusell's views is appropriate. Even the approach applied to determine the content validity and reliability of the module is appropriate. This is an eye opener to module builders: be it teaching modules, motivational modules, training modules or even academic modules in determining the validity and reliability of the module. The results obtained indirectly, motivates new module builders in future.

### **RECOMMENDATIONS AND CONCLUSION**

Based on the results obtained from the research on the special drug rehabilitation module, below are a few recommendations specially for AADK and researchers for further research in this area.

1. As it clearly shows that this module has high validity and reliability, it is strongly recommended to be implemented wholly at all rehabilitation centers run by the government or private sectors.
2. As the processes in module building as suggested by Rusell (1974) is appropriate, it is highly recommended to be used as a guide by researchers when new modules are explored in this field in the future
3. The validity of the questionnaire created by Jamaludin Ahmad (2002) has proven its validity, therefore researchers and module builders are strongly recommended to use this questionnaire to determine the validity of their modules.
4. This research also proves the reliability of this module can be determined by the questionnaire which is based on the objectives of the activities of this module. Researchers and module builders are strongly recommended to use this approach to determine the reliability of this module.
5. As this research does not permit to determine the effectiveness of this module, it is strongly recommended that other researchers carry out the research on this field with drug addicts who are still undergoing treatment or

even those who are suspected to be involved in the misusing of drugs before they are charged or put in rehabilitation centers.

6. Further research related to the validity and reliability of this module can be conducted at rehabilitation centers found in Malaysia. If the results obtained based on the quality of psychometric such as reliability and validity is the same as obtained in this research, it is recommended that this module be used widely at all rehabilitation centers nationwide.

The research conducted successfully has contributed in developing a special module for the drug addicts who are undergoing treatment. Although this module is designed for drug addicts under this category, it still could aid those who intend too help drug addicts who are just trying to use drugs, want to use drugs or even addicts who have failed to recover. It is hoped that this module would provide some form of contribution to those involved directly or indirectly in the misuse of drugs.

## REFERENCES

- Abu Bakar Nordin (1995). *Penilaian Afektif*. Kajang: Masa Enterprise.
- Agensi Anti Dadah Kebangsaan (2005). *Dadah: Apa Anda Perlu Tahu?*. Kuala Lumpur: Delmu (Malaysia) Sdn. Bhd.
- Edward, G.C., & Richard A.Z. (1979). *Reliability and Validity Assessment*. United States of America: Sage Publications, Inc.
- Fraenkel, J.R., & Wallen, N.E. (1997). *How to Design and Evaluate Research in Education*. 3<sup>rd</sup> Edition. New York: Mc. Graw Hill, Inc.
- Jamaludin Ahmad (2002). *Kesahan, Kebolehpercayaan dan Keberkesanan Modul Program Maju Diri ke atas Motivasi Pencapaian di Kalangan Pelajar-Pelajar Sekolah Menengah Negeri Selangor*. Tesis Doktor Falsafah yang tidak diterbitkan. Serdang: Universiti Putra Malaysia.
- Jamaludin Ahmad & Sidek Mohd Noah (2001). Pendekatan Alternatif Menentukan Kesahan dan Kebolehpercayaan Modul Program Maju Diri Jabatan Pendidikan Selangor. *Jurnal PERKAMA* 9, 97-118.
- Jamaludin Ahmad (2007). *Kaunseling dan Modul Pemulihan Dadah*. Serdang: Universiti Putra Malaysia (dalam proses penerbitan – draf buku telah siap).
- Mohd Majid Konting (2004). *Kaedah Penyelidikan Pendidikan*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

- Norusis, M.J., & SPSS Ins. (1993). *SPSS for Windows: Base System user's Guide*. Chicago: SPSS Ins.
- Rusell, J.D. (1974). *Modular Instruction: A Guide to the Design, Selection, Utilization and Evaluation of Modular Materials*. United States: Publishing Company.
- Sidek Mohd Noah (2001). *Perkembangan Kerjaya: Teori dan Praktis*. Serdang: Universiti Putra Malaysia.
- Sidek Mohd Noah (2002). *Rekabentuk Penyelidikan: Falsafah, Teori dan Praktis*. Serdang: Universiti Putra Malaysia.
- Sidek Mohd Noah dan Jamaludin Ahmad (2005). *Pembinaan Modul: Bagaimana Membina Modul Latihan dan Modul Akademik*. Serdang: Universiti Putra Malaysia.
- Tuckman, B.W., Waheed, M.A. (1981). Evaluating an Individualized Science Programme for Community College Students. *Journal of Research in Science Teaching*. 18, 489-495.
- Vale, J.D. (1998). Traditional Reliability. <http://www.ece.edu/~koopman/de>. (23 Julai 2002).