PENDIDIK DAN PENDIDIKAN

# A Comparison of the Self-Concept, Locus of Control and Anxiety of A Group of Drug - using and Non-drug using Secondary School Students in Penang.

Maznah Ismail and Choo, P.F, Pusat Pengajian Ilmu Pendidikan Universiti Sains Malaysia

Rencana ini melaporkan kajian tentang beberapa ciri psikologi pelajar-pelajar sekolah menengah yang terlibat dan yang tidak terlibat dengan penggunaan dadah. Ciri-ciri yang diberi tumpuan adalah dari segi konsep kendiri, lokus kuasa dan tahap kebimbangan mereka. Seramai 1178 orang pelajar sekolah menengah atas di Pulau Pinang dijadi sebagai sampel kajian. Pelajar-pelajar ini dikumpulkan ke dalam tiga kumpulan berdasarkan jawapan mereka terhadap corak penggunaan dadah. Kumpulan-kumpulan ini terdiri daripada: kumpulan bukan pengguna; kumpulan pengguna dadah lembut dan kumpulan pengguna dadah keras.

Konsep kendiri sampel diukur dengan menggunakan soalselidik 'Tennessee Self- Concept Scale,' sementara lokus kuasa diukur dengan menggunakan soalselidik 'The Rotter Internal-External Locus of Control,' dan paras kebimbangan diukur dengan menggunakan soalselidik 'The Spielberger's State-Trait Anxiety Inventory'.

Hasil kajian menunjukkan bahawa sebahagian besar daripada para pelajar tidak terlibat dengan penggunaan dadah. Juga didapati bahawa jika dibandingkan dengan pelajar-pelajar yang tidak menggunakan dadah, mereka yang mengguna dadah lebih rendah dalam tiga aspek konsep kendiri, iaitu konsep kendiri berhubung dengan moral, tingkah laku dan keluarga. Sebaliknya, mereka mempunyai skor yang lebih tinggi bagi ciri kritik diri.

Seterusnya hasil dapatan kajian tidak menunjukkan perbezaan yang signifikan di antara pelajarpelajar ini dari segi sifat lokus kuasa dan kebimbangan.

Rencana ini diakhiri dengan membincangkan beberapa implikasi hasil kajian kepada usaha-usaha mencegah dan mengawal penglibatan para pelajar dalam penggunaan dadah. Beberapa teori telah disebut bagi menjelaskan ketidakbezaan yang signifikan dalam ciri-ciri psikologi yang dikajikan. Seterusnya soal ketidakbezaan ini dikaitkan dengan kesulitan yang sering guru hadapi dalam usaha untuk mengenalpasti siapa di kalangan pelajar yang terlibat dengan penagihan dadah.

#### Introduction

The non-medical use of drugs among the school children in Malaysia has been amply documented. For example, studies conducted by the National Drug Research Centre have indicated that 11.5 % of 16,166 school children surveyed in the states of Selangor and Penang have had some experience with the non-medical use of drugs and that a trend towards multiple drug use was becoming evident (Navaratnam, 1981). Further, it was also shown that 30% of the drug users started using drugs before the age of 19. With regard to the Penang sample, it was found that 13.7% of the upper secondary school students aged 16 to 18 years were drug users.

It is evident that the involvement of Malaysian students in drug abuse is becoming a

A Comparison of the Self-Concept, Locus of Control and Anxiety of A Group of Drug – Using and Non-drug using Secondary School Students in Penang

serious problem and strategies have to be devised to help curb the problem. However as a first step in this direction it is necessary to obtain a clear picture of the etiology of drug abuse among this segment of the population. Research done in other countries has noted that no single factor causes chemical dependence. Several factors have been hypothesized to be related to the proneness towards drug abuse, for example family relationships, religious beliefs, peer influence, socio-economic status as well as psychological factors (Spencer & Navaratnam 1981; Padina & Schuele 1984).

Among the psychological factors, self-concept, locus of control and anxiety have often been studied in relation to drug abuse. Thus, compared to non-drug abusers, drug-abusers were found to have lower self-esteem (Hebeisen 1975) and lower mean self-concept (Jones, 1982; Choo, Navaratnam & Ward, 1982). Further, Jurich & Polson (1984) found that the drug-abusers used drugs to enhance their self-concept. With respect to anxiety, several studies have clearly indicated a significant relationship between drug abuse and reported symptoms of depression and anxiety (e.g. Wells & Stacey, 1976, Colten, 1979; Spencer & Navaratnam 1980).

Other studies which investigated the relationship between locus of control and drug abuse behaviour, found that drug addicts tended to exhibit an external locus of control (e.g. Obitz, Cooper & Madeiros, 1974, Alexander & Dibbs, 1977, Carman 1977, Jurich and Palson, 1984). However, some other studies have indicated that addicts were more internally controlled than non-addicts (e.g. Goss & Moroscho, 1970 and Berzines & Ross, 1973). Such inconsistent findings were further noted in a literature review on the relationship between drug abuse and perceived locus of control by Plumb et. al.(1975) addictive behaviour.

# Purpose of the Study

The study which is a part of a larger project on the psychosocial correlates of adolescent drug abuse behaviour, examines the relationship between self-concept, locus of control and anxiety and drug abuse in a group of secondary school students in Penang. More specifically, the study attempts to compare the drug abusers from the non-users in terms of these three psychological dimensions.

# Methodology

A sample of upper secondary students was chosen for this study. Four types of measure were used such as, (a) pattern of substance use, (b) self-concept, (c) locus of control and (d) anxiety. The sample was then first classified into groups using the findings of the pattern of substance use. The groups were then compared on their measures of self-concept, locus of control and anxiety.

testing.

# Sample

The sample consisted of 1178 upper secondary school students in Penang. There are several reasons for choosing this group of students. Firstly, the completion of the secondary school represents the end of an important developmental stage in our society, since it demarcates both the end of universal public education and, for many, the end of living in the parental home. Secondly, the completion of secondary school represents the jumping off point from which young people diverage into widely differing social environments and experiences.

53

# Maznah Ismail and Choo, P.F.

One limitation in using the present sample is that it does not include in the target population those young men and women who drop out of secondary school before graduation (or before the last few months of the upper secondary year to be more precise). This excludes an important segment since illicit drug use has been known to be higher in the 'drop-out' group. (Smart et. al., 1981). Due to financial constraints, and the difficulty of locating these young people, it was decided not to include them in this study.

# Instrumentation

1. Pattern of Substance Use

A questionnaire was constructed requesting the students to provide information regarding their use of soft drugs and hard drugs. In this study soft drugs consist of alcohol and cigarettes while hard drugs refer to opium, cannabis, heroine and tranquillisers.

#### 2. Self-Concept

The self-concept was measured by means of the Tennessee Self-Concept Scale (TSCS) which consists of 100 self descriptive statements to which a person responds on a five-point Likert scale ranging from 'Completely True' to 'Completely False'. Ninety of the 100 items are divided into an equal number of positive and negative statements. The remaining 10 items form the self-criticism scale. The scale is self administering and it is applicable to the whole range of psychological adjustment from healthy, well adjusted people to psychiatric patients. In this study, the major scales used were the physical self; the moral-ethical self; the personal self, the family self, the social self, identity, self-satisfaction, behaviour and the self-esteem which is based on the overall score of the previous scales. In addition, the self-criticism score was also obtained.

The norms for the means, standard deviations and reliabilities for all the scales above are reported in the manual of the Tennessee Self-Concept Scale (Fitt, 1965). The norm group was a broad sample of 626 people.

# 3. Locus of control

Locus of control was measured by means of the Rotter Internal-External Locus of Control scale (Rotter, 1966) which consists of 23 question pairs, using a forced-choice format, plus six filler questions. Internal statements are paired with external statements. One point is given for each external statement selected. Score can range from zero (most internal) to 23 (most external). Rotter (1966) reported acceptable reliability and discriminant validity. Also, it is conveniently brief and can be easily administered.

4. Anxiety

In this study, anxiety was measured using the trait anxiety scale of the Spielberger's State-Trait Anxiety Inventory (Spielberger et. al. 1970). The trait anxiety scale consists of 20 items which measure how a person generally feels. High reliability (0.92) for female high school students, and (0.89) for male high school students was reported in the manual. Similarly, acceptable discriminant validity was also reported in the manual.

The questionnaire on the pattern of drug use, the Tennessee Self-Concept Scale, the Rotter Internal-External Locus of Control, and the Spielberger's Trait Anxiety Inventory were presented to the students bilingually, that is in both the National Language A Comparison of the Self-Concept, Locus of Control and Anxiety of A Group of Drug – Using and 55 Non-drug using Secondary School Students in Penang

and the English Language. The National Language version of the measures was produced, checked and pre-tested.

#### Procedure

Administration of Questionaire: The questionnaire on the pattern of drug use and the three psychological measures were administered with the assistance of the schools. The standardized procedures detailed in the respective instruction manuals were adhered to, and testing sessions were arranged to concide with the normal classroom period whenever possible. Complete anonymity was maintained by not requiring the students to supply personal particulars.

#### Analysis of Data

For comparison purposes, three groups of students were formed based on the pattern of substance use. The three groups were the non-user group, the soft drug group and the hard drug group. The non-user group comprises students who answered 'Never' or 'Not Applicable' to questions on the frequency of cigerette use, alcohol use and hard drug use respectively. Inshert, the non-user group comprise students who reported that they had never been involved in any type of substance-use.

In this study, 'soft drugs' refer to alcohol and cigarettes. The soft drug group comprises students who answered 'Regularly', 'Once in a While', 'Rarely' and 'Smoked/Drank before but not Smoking/Drinking Now' to questions on the frequency of cigarette use and alcohol use respectively. Thus the soft drug group comprises students who had been involved in cigarette use, alcohol use, or both the cigarette and alcohol use.

The hard drug group comprises students who had indicated their involvement in various types of hard drugs. 'Hard drugs' refers to opium, cannabis, morphine, heroin, sedative/barbiturates, pep pills/amphetamines, tranquillisers and valium/librium. The hard drug group also included students who combined using both soft drugs and hard drugs. This means that those students who used hard drugs and cigrattes, hard drugs and alcohol, and hard drugs, cigarettes and alcohol, were included in the hard drug group.

The mean and standard deviation of the 3 psychology tests were calculated for the three groups. The F-test was used as test for significant difference between the groups.

Based on this classifications, out of a sample of 1178 student, 855 (72.6%) of the students belonged to the non-user group, 288 (24.4%) belonged to the soft-drug group and the remaining 35 (2.97%) of students belonged to the hard drugs group.

Table 1 shows the mean, standard deviation of the 3 psychological tests for the three groups. With respect to the self-concept, the results show that the three groups differed significantly on four of the ten self-concept scales, namely the moral-ethical self, the self-criticism, and the behaviour. The trend of the differences indicates that the students using hard drugs tended to score lower on the moral- ethical scale when compared to the non- users but somewhat higher when compared to the soft drugs users. With regard to the family self scale and the behaviour scale, the hard drug users score lowest among the three groups. These students, however, score highest for the self-criticism scale.

These results suggest that students taking hard drugs tended to have lower opinions regarding their moral worth, and their worth as a family member. They also tended to have have poorer perception of their own behaviour or the way they functioned. On the other hand, the high score on self-criticism indicates that they were more critical of their own weaknesses or were less defensive than other students. With regard to the overall self-esteem, the results show no significant difference among the three groups. Similarly, no significant differences were found among the three groups with respect to their locus of control score.

Psychological Measures	Non User		Soft Drug		Hard Drug		F-test
	Mean	SD	Mean	SD	Mean	SD	(p)
TSCS Score		1					
Physical Self	68.84	8.07	68.40	7.91	66.89	8.17	NS
Moral Self	64.59	6.61	62.56	6.26	63.39	7.36	0.01
Personal Self	66.73	8.35	66.31	8.38	65.71	7.77	NS
Family Self	67.25	6.80	66.25	6.92	64.46	6.89	0.01
Social Self	63.3,6	7.47	62.92	7.70	64.40	8.96	NS
Self-Criticism	27.32	5.22	29.71	5.34	30.09	6.88	0.01
Identify	118.77	13.25	118.58	13.39	116.40	14.81	NS
Self-Satisfaction	100.15	10.07	99.97	10.59	102.74	11.69	NS
Behaviour	110.84	12.15	107.89	11.60	105.60	12.16	0.01
Self-Esteem	329.75	31.07	326.44	31.06	324.74	31.66	NS
Locus of Control	8.81	3.25	9.23	3.28	9.42	3.96	NS
Anxiety	42.88	7.54	42.33	8.03	41.89	9.11	NS

# TABLE 1: MEANS AND STANDARD DEVIATIONS OF THE THREE PSYCHOLOGICAL MEASURES FOR THE USER AND NON-USER GROUPS

With respect to anxiety, the findings also reveal no significant differences among the three groups. The lack of stronger differences between the non-drug users and the drug-users in these psychological aspects measured could be due to the instruments used which were probably not sensitive enough to be able to discriminate between the two groups.

# Discussion

The findings of this study show that generally the adolescent drug users are not very different from the non-users with respect to the psycological variables studied.

The lack of significant difference in the locus of control measure between the two groups

A Comparison of the Self-Concept, Locus of Control and Anxiety of A Group of Drug – Using and Non-drug using Secondary School Students in Penang

57

appears to add further to a growing body of literature indicating inconsistent findings on locus of control. In view of conflicting evidence, Plumb et-al (1975) suggested a resolution in terms of a self-medication theory of drug abuse. This perspective suggests that the drug abuser uses the drug as a medication to provide relief from his emotional stress. Once he has medicated himself, he is able to function reasonably well and is even able to cope with the conflict arising from legal and social disapproval of his habit. The addict's problem may inevitably lead to major crisis (e.g. being disowned by his family) at which point the distress becomes acute that he has to seek relief through treatment or some other means. The addict may, thus once again perceive himself as having some control over his reinforcements.

A similar notion is proposed by the CAP theory (cognitive affective-pharmacogenic control theory) (Gold, 1980). The theory focuses on the interaction of the individual's style and affective experience with the pharmacogenic effects of the drugs. The theory has the following major assumptions:

- (a) human behaviour is mediated by intervening variables such as belief, strategies and expectancies,
- (b) the individual's evaluation of a situation determines his emotional response to it,
- (c) the individual's thoughts, feelings and behaviour are casually interactive.

In trying to explain the drug abuse behaviour, the CAP theory starts from the premise that in attempting to meet the society's demands or his own, the individual experiences conflicts and difficulties which produce stress and anxiety. The important point is the way the individual interprets the anxiety he is experiencing. It may be seen as the basis for his inability to control his environment or to reduce the causes of his stress. Drug is used to obtain relief from the discomfort of the emotional stress. At the same time, it provides temporary feeling of ecstasy and a sense of power, control and well being. To quote Gold (1980), 'Thus, drugs can do for abusers what they believe they cannot do for themselves: get rid of anxiety, leading to good feeling about themselves, and making them believe they are competent, in control, and able to master their environment.'

Both the self-medication theory and the CAP theory are suggestive. Nonetheless, they are quite appealing in view of the fact that in the present study the drug users were found to be not more external and not more anxious than the non-users. In addition, their overall self-esteem was not significantly different from that of the comparison groups. Further, out of the ten self-concept scales, the drug users differed from the non-users in only four viz, the moral-ethical self, the family self, the behaviour scale and the self-criticism. The lower score registered by the drug users in the first three scales and a higher score for the self-criticism scale probably reflect the conflicting situation that the abuser is in. On the one hand he is sensitive to the social disapproval of his habit, yet he may be using the drug as a form of self-medication in order to function in his daily living.

The findings of the study point to several educational implications. First, it should be noted that a great majority of the students had never used either soft or hard drugs. For this group, preventive measures should be provided to ensure their continued non-involvement in the substance-use. Maznah Ismail, Choo, P.F. & Hoo, S.K. (1986) had discussed some of the major approaches and strategies used in drug abuse prevention programmes. They concluded that the drug prevention education programmes need to involve not just the school, but also the whole community with the commitment to keep the environment free from drug.

#### Maznah Ismail and Choo, P.F.

The findings also highlight the important role of self-perception in the well-being of the students and their need to maintain a positive self-regard even if they have to resort to taking drugs as suggested by the self-medication theory. The question is how can the students be helped to develop a positive self perception without being dependent on the substance-use? It is here that both the school and the home where the adolescents spend considerable amount of their time interacting with the significant people in their life, can play their parts to ensure that the students are provided with experiences which can contribute to the development of positive self-worth in them.

An equally important finding of the study is that the students who used drugs and those who did not use drugs were not very different from one another in terms of some of the psychological measures examined in the study. Contrary to expectation, the drug users reported that they were not more anxious or more external than the non-drug users. This poses difficulty for teachers to distinguish between these two groups of students, ie. drug users and non-users. non-users.

Unless the teachers know what to look for, they may not find many clues to help them identify which of the students are involved in substance-use. What this means is that the teachers, particularly those involved in student counselling need to be provided with knowledge and skills in how to detect symptoms of drug-use in the students in order to take the necessary steps to help them.

In conclusion, prevention and cure should go hand-in-hand in the effort to help the students develop and lead a satisfying and productive life. While the role of the school has often be associated with prevention education, it cannot be less strongly emphasized the important part that the school can play in indentifying students who are drug dependent so that they can be provided with appropriate remedial help for rehabilitation.

#### References

Abdul Ghafar Taib (1988) : Dadah Strategi dan Kawalan di Sekolah-Sekolah, K.L., DBP.

- Alexander, B.K. & Dibbs, G.S. (1977). Interpersonal perception in addict families. Family Process, 16, 17 - 28/
- Berzines, J.I. & Ross, W.F. (1973). Locus of control among opiate addicts. Journal of Consulting and Clinical Psychology, 40, 84 - 91.
- Carman, R.S. (1977). Internal external control and drug use among junior high school students in a rural community. *International Journal of the Addictions*, 12 (1), 53 64.
- Choo, P.F., Maznah I., Navaratnam, V. & Hoo, S.K. (1986). A Comparative Study of The Psycho-Social Profile of Drug Using and Non-drug School Children. Penang National Research Drug Centre.
- Choo, P.Y., Navaratnam, V. & Ward, C. (1982). A comparative Analysis of The Psychological Profile of Drug Using and Non-using Populations. Penang, National Research Drug Centre.
- Colten, M.E. (1979). A descriptive and comparative analysis of self-perceptions and attitudes of heroin addicted women. In Addicted Women: Family Dynamics Self-perceptions and

A Comparison of the Self-Concept, Locus of Control and Anxiety of A Group of Drug – Using and Non-drug using Secondary School Students in Penang

Support Systems. NIDA Washington, D.C: Dept. of Doc., U.S. Support Systems Govt. Print-off. 7 - 39.

Fitts, W.H. (1965). Tennnessee Self-concept Scale (Manual), Nashville,

- Gold, S.R. (1980). The CAP Control theory of drug abuse. In D.J. Lettieri, et. al. (eds.) Theories on Drug Abuse. Selected Contemporary Perspectives. NIDA Res. Mono Series No. 30 Rockville, Maryland.
- Goss, A. & Morosko, T.E. (1970). Relation between a dimension of Internal-external control and the MMPI with an alcoholic population. *Journal of Consulting and Clinical Psychology* 34, 189 - 192.
- Hebeisen, R. A.N. (1975). Self-esteem as a predictor of adolescent drug abuse. In D.J. Lettieri (ed.) Predicting Adolescent Drug Abuse: A Review of Issues, Methods and Correlates, NIDA Research Issues II, Rockville, Maryland, 193 - 206.
- Jones, E.A. (1982). Relationship of self-concept to drug use and non-drug use among 9th. grade students. *Dissertation Abstracts International*, Vol. 42, 4274-A.
- Jurich, A.P. & Poison A. (1984). Reasons for drug use: comparison of drug users and abusers. *Psychologcal Reports*, 55, 371 - 378.
- Maznah Ismail, Choo, P.F. & Hoo, S.K. (1986): Pendekatan- Pendekatan dan Strategi Pendidikan Pencegahan Salahgunaan Dadah. Pendidik dan Pendidikan, Jilid 8, 1 - 10.
- Navaratnam, V. (1981). Drug Use Among Malaysian Youth Jawatankuasa Anti Dadah Negeri Selangor, K.L.
- Obitz, F.W., Cooper, K. & Madeiros, D.C. (1974). General and Specific Perceived Locus of Control in Heroine Addicts. *International Journal of the Addictions*, 9 (5), 757 760.
- Padina, R.J. & Schuele, J.A. (1984). Psycho-social correlates of alcohol and drug use of adolescent students and adolescents in treatment. *Journal of Studies on Alcohol*, 44 (2), 950 - 974.
- Plumb, M.M., D'Amanda, C. & Taintor, Z. (1975). Chemical Substance Abuse and Perceived Locus of Control. In D.J. Lettieri (ed.) Predicting Adolescent Drug Abuse: A Review of Issues, Methods and Correlates. NIDA Research Issues II, Rockville, Maryland. 225 - 261.
- Rotter, J.B. (1966). Generalised expectancies for internal versus external control of reinforcement. *Psychological Monograph 1*. No. 609.
- Smart, R.g., Arif, A., Hughes, P., Medina Mora, M.E., Navaratnam, V., Varma, K. & Wadud, K.A. (1981). Drug Use Among Non-Student Youth. WHO Offset Publication No. 60., Geneva, WHO.
- Spencer, C. & Navaratnam, V. (1980). Social attitudes, self-descriptions and perceived reasons for using drugs: a survey of secondary school population in Malaysia. Drug & Alcohol Dependence, 5, 421 - 427.

59