

# Social Factors Associated with Development of Initial Drug Use Behaviour among Adolescents: A Comparative Study between Users and Non Users

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## ABSTRAK

*Kajian dijalankan ke atas sampel 183 pengguna dadah yang sedang menjalani proses rawatan dan pemulihan di Pusat-pusat Pemulihan Dadah Kerajaan (Malaysia Barat) dan 200 bukan pengguna dadah yang sedang menuntut di Universiti Pertanian Malaysia, Serdang, Selangor. Kajian ini bertujuan untuk mengenalpasti beberapa faktor sosial yang berkaitan dengan pembentukan tingkah laku permulaan penggunaan dadah di kalangan remaja. Angkubah "memiliki rakan-rakan sebaya yang menggunakan dadah" terbukti mempunyai hubungan yang signifikan dengan tingkah laku permulaan penggunaan dadah. Hasil kajian memberikan implikasi tentang perlunya dilaksanakan program-program intervensi di peringkat individu dan sekitaran untuk menghindarkan para remaja daripada mencuba dadah.*

## ABSTRACT

*The study was conducted on a sampel of 183 drug users undergoing treatment and rehabilitation in Government Rehabilitation Centres (West Malaysia), and 200 non-drug users studying in Universiti Pertanian Malaysia, Serdang, Selangor. The purpose of the study was to identify some social factors related to the development of initial drug use behaviour among adolescents. The variable, "association with peers using drugs", was significantly related to initial drug use behaviour. This stresses the importance of providing intervention programs at the individual and environmental levels to prevent adolescents from experimenting with drugs.*

## INTRODUCTION

Sociological approach is one of the major procedures frequently utilized to examine the etiology of initial druge use behavior. This approach emphasizes the influence of environmental factors such as place of

residence, family income, family size, peers and the family institution surrounding the individual in initiating drug use behaviour. As such, related studies often link variables such as low social class (Choo et al. 1980), family fragmentation (Tec. 1970; Craig & Brown 1975) and drug-using peers (Adler & Lotecka 1975; Nawi Jusoh 1978; Navaratnam & Kulamoli 1987) with initial drug use behaviour.

The question that arises out of this sociological studies is the inconsistencies of results obtained. For example, in Mohan's et al. (1981) study, drug use was not found to be significantly associated with family income, father's occupation, family structure and place of residence. So did Jessor and Jessor's (1977) study which found almost no relation between attributes of the socio demographic environment, including the Holling shed index of socioeconomic status, and drug use. Wiener (1969) found no significant difference as regards parental separation and size of family between drug users and the controls. Steffenhagen et al. (1969) and Krupinski (1973) reported no significant relationship between family fragmentation and early drug use. Spencer and Navaratnam (1976) found no social class differences between users and non-users but reported a profound relationship between drug-using peers and initial drug use behaviour. Navaratnam (1981), Kaplan et al. (1982) and Lee (1986) are among recent investigations describing such a relationship. The overall inconsistencies of social correlates and drug use suggest a need for more research. Thus, the present study is conducted to fulfil this need.

## MATERIALS AND METHODS

### FOCUS OF THE STUDY

This study focuses on the initiation of drug use, the drug ganja (marijuana), and adolescents (12 to 22 years old).

Focus on the initiation of drug use is timely since studies on drug abuse should start at the period when the individual begins experimenting with drugs. How an individual comes to initially use a particular drug appears to be a logical place to begin explaining drug use. At the same time, focus on the use of ganja (marijuana) is appropriate since findings from studies conducted locally and internationally showed that ganja (marijuana) is the initial and major drug experimented on by drug users besides cigarettes (Kandel 1975; O'Donnel & Clayton 1979, Choo & Navaratnam 1980).

The adolescent group is the focus of the study due to the fact that in Malaysia the majority of drug users start using drugs within the 15-24 years age group (Pasukan Petugas Anti Dadah 1988). This age group is comprised mainly of adolescents.

#### STUDY AREA

The study area for the drug users (case group) is made up of Government Drug Rehabilitation Centres of Tampoi, Tampin, Perlop, Bukit Mertajam and Besut. Every rehabilitation center represents the Southern, Central, North Central, Northern and Eastern regions of Peninsular Malaysia.

University of Agriculture Malaysia (UPM) was chosen as the study area for the non-drug using group (control group). This was chosen due to its geographical location which is within a short distance from the investigator's place of residence, and travel expenses considerations. Also, UPM is one of two universities in Malaysia that offers studies at the diploma besides the degree levels. Thus, there is a wider age distribution which fits the sample criterion of 23 years old and below.

#### STUDY SAMPLE

Three hundred and eighty-three subjects were chosen in this investigation. Of these, 183 were dependent upon drugs and receiving treatment at the Government Rehabilitation Centers throughout Peninsular Malaysia. The remaining 200 subjects comprised non-drug users who have never used drugs of any kind before. This control group was drawn at random from students of Agricultural University of Malaysia. The sample was chosen based on the criteria of the male sex, the Malay race, and age or at below 23 years.

Males were chosen for this study since inmates of the Government Rehabilitation Centres are comprised of the male sex only. The Malay race was used as one of the criterion for selection since the majority of drug users in Malaysia is overwhelmingly Malay (Pasukan Petugas Anti Dadah 1988). The criterion of age at or below 23 years old was chosen for this study since the focus of the study was the adolescent age group (12 to 22 years). The upper age limit for 23 years old was included to account for adolescents who initiated drug use at the end of their adolescence. A report by the National Anti-Drug Force indicated that the relevant authorities were only able to identify drug users one or more years after they had been involved with drugs (Pasukan Petugas Anti-Dadah 1988).

The case (drug users) and the control groups (non-drug users) in this study range in age from 18 to 23 years. For the case group, mean age was 21.3 years, and for the control, mean age was 20.6 years.

#### PROCEDURE

This study utilized a structured questionnaire which was administered to all subjects individually and privately. The subjects were advised that their identity would remain anonymous. They were requested not to put their names on the questionnaire.

There were two sets of questionnaires of which set I was administered to the drug users whereas Set II was for the non-drug users. Set I questionnaire was basically the same as that of Set II, except for the inclusion of a few additional questions in the former. The former consisted of three sections which included demographic information, exposure to illicit drugs and drug experimentation. Set II consisted of 2 sections which were demographic information and exposure to illicit drugs. Both sorts of questionnaires were pretested in the study areas.

The actual study was conducted in the Government Rehabilitation Centers for a period of 3 months commencing in early December, 1987 and ending in late February, 1988. For the control group, the study was completed within the month of March, 1988.

#### DATA ANALYSIS

Data were processed and analyzed using Statistical Package for the Social Sciences (SPSS) Computer Program. Among the statistical tests conducted were frequency distribution, percentage, Chi-square, and Cramer's Vard phicoefficient.

#### RESULTS

Hypotheses: *Family size is not associated with the development of initial drug use*

A study by Deva (1977) found that family size is associated with the development of initial drug use. In the study, it was reported that the majority of drug users were originally from large families (more than 5 children).

Chi-square analysis of data in the present study showed that the null hypothesis cannot be rejected. Thus family size is not associated with the development of initial drug use behaviour (Table 1).

Hypotheses: *Place of residence is not associated with the development of initial drug use*

Vaillant (1966) reported that addicts were generally found in urban and metropolitan areas. In the present study, Chi-square analysis of the data showed that the null hypothesis had to be rejected, that is, place of residence is associated in the development of initial drug use behavior (Table 2). Nevertheless, test of the strength of association showed only a weak, positive correlation.

TABLE 1. Initial drug use by family size (N = 383)

Family Size	Drug	Users	Non-Drug	Users
Small (1-3 Children)	18	9.8%	24	12.0%
Medium (4-5 Children)	56	30.6%	68	34.0%
Large (More than 5 children)	109	59.6%	108	54.0%
Total	183	100%	200	100%

Chi-square = 1.270; d.f. = p > 0.01

TABLE 2. Initial drug use by place of residence (N = 383)\*

Place of Residence	Drug	Users	Non-Drug	Users
Kampung (Village)	101	55.28%	133	66.5%
Town (District Center)	38	20.8%	49	24.5%
City (State Capital)	44	24.0%	118	9.0%
Total	183	100%	200	100%

Chi-square = 15.946; d.f. = 2; p > 0.01

Cramer's V = 0.204

\*drug users, place of residence refers to their residence before initial drug users, this refers to place of residence during the whole period of adolescence.

*Hypotheses: Who the person lives with is not associated with the development of initial drug use*

During adolescence, peer pressure is said to have a much greater influence than the family on the individual's development (Jensen 1972; Akers et al. 1979). As shown, adolescent children who are not under the supervision and control of their parents (not living with their parents) are often easily influenced by their peers to try drugs.

In this study, Chi-square analysis of the data showed that the null hypothesis cannot be rejected thus indicating no association between who the person lives with and the development of his initial drug use (Table 3)

TABLE 3. Initial drug use by who the person lives with (N = 383)\*

Who The Person Lives With	Drug Users	Non-Drug Users
Parents	13 74.3%	169 84.5%
Fathers Only	8 4.4%	5 2.5%
Mothers Only	24 13.1%	15 7.5%
Total	183 100%	200 100%

Chi-square = 6.209; d.f. = 3 p > 0.01

\*For drug users, who the person lives with refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

*Hypotheses: Father's educational attainment is not associated with the development of initial drug use behaviour*

Studies by Penning and Barnes (1982) and Smart and Fejer (1969) reported that the use of drugs was found to be greater among adolescents whose parents had a higher education.

In the present study, no association was found between the father's educational attainment and the drug user's development on initial drug use behaviour (Table 4).

*Hypotheses: Mother's educational attainment is not associated with the development of initial drug use behaviour*

Studies by Smart and Fejer (1969) and Penning and Barnes (1982) also reported that drug users had mothers with high level of education.

In this study, no association was found between mother's educational attainment and the development of initial drug use behaviour (Table 5).

*Hypotheses: Fathers' occupational status is not associated with the development of initial drug use behaviour*

The study by Smart and Fejer (1969) found that drug users commonly have fathers who are either in the professional or managerial sectors.

The present study found no association between the father's occupation and the development of initial drug use behavior (Table 6).

TABLE 4. Initial drug use by father's educational attainment\*  
(N = 343\*\*)

Father's Educational Attainment	Drug Users	Non-Drug Users
No Schooling	17 10.7%	31 16.8%
Primary School	98 61.6%	86 46.7%
Lower Certificate of Education (Junior High)	14 8.8%	30 16.3%
Malaysian Certificate of Education (High School)	14 8.8%	16 8.7%
Higher Certificate of Education (Pre-University)	5 3.2%	9 4.9%
College/University	11 6.9%	12 6.6%
Total	159 100%	184 100%

Chi-square = 10.231; d.f. = 5  $p > 0.01$

\*For drug users, father's educational attainment refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

\*\*Excluding respondents without living father's.

*Hypotheses: Parents' involvement in the workforce is not associated with the development of initial drug use behaviour*

Hoffman (1984) emphasized that involvement of mothers in the workforce causes them to be neglectful in providing supervision and love for their children. As a result, their children are easily led into deviant behaviours such as drug use.

In the present study, no association was found between parents' involvement in the work force and the development of initial drug use behavior (Table 7).

*Hypotheses: Parents monthly income is not associated with the development of initial drug use behaviour*

Vaillant (1966) found that addicts generally come from families in the lower socioeconomic groups. However, Mohan et. al. (1981) reported that family income was not associated with drug use behaviour.

TABLE 5. Initial drug use by mother's educational attainment\*  
(N = 370\*\*)

Mother's Educational Attainment	Drug	Users	Non-Drug	Users
No Schooling	40	22.9%	58	29.7%
Primary School				
Lower Certificate of Education (Junior High)	93	53.1%	108	55.4%
Malaysian Certificate of Education (High School)	20	11.4%	10	5.1%
College/University	17	9.7%	10	4.7%
	5	2.9%	9	4.7%

Chi-square = 9.658; d.f. = 4 p > 0.01

\*For drug users, mother's educational attainment refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

\*\*Excluding respondents without living mother's.

TABLE 6. Initial drug use by father's occupational status\*  
(N = 343\*\*)

Father's Occupational Status	Drug	Users	Non-Drug	Users
Business/Administration	43	27.0%	30	16.3%
Management	30	18.9%	28	15.2%
Technical/Clerical	21	12.2%	17	9.2%
Manual	48	30.2%	74	40.2%
Other	17	10.7%	35	19.1%
Total	159	100%	184	100%

Chi-square = 12.819; d.f. = 4; p > 0.01

\*For drug users, father's educational attainment refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

\*\*Excluding respondents with non-living fathers.



TABLE 7. Initial drug use by parent's involvement in the work force\*  
(N = 330\*\*)

Parents' Involvement in The Work Force	Drug Users	Non-Drug Users
Father in Work Force	106 70.2%	141 78.8%
Both Parents in Work Force	45 29.8%	38 21.2%
Total	151 100%	179 100%

Chi-square = 2.720; d.f. = 1;  $p > 0.01$

\*For drug users, parents involvement in the work force users this refers to the whole period of adolescence.

\*\*Represents only those respondents whose parents stay together.

In the present study, the null hypothesis was rejected and the alternative was accepted. Thus parents' monthly income was found to be associated with the development of initial drug use (Table 8). Nevertheless, the strength of the association was only a weak positive correlation.

TABLE 8. Initial drug use by parent's monthly income\*  
(N = 383\*\*)

Parents' Monthly Income	Drug Users	Non-Drug Users
\$300 and below	20 10.9%	71 38.5%
\$301 - 601	88 48.1%	73 36.5%
\$601 - 900	32 17.5%	21 10.6%
\$901 - 1200	13 7.1%	14 7.0%
\$1201 and above	30 16.4%	15 7.5%
Total	183151 100%	200 100%

Chi-square = 41.539; d.f. = 4;  $p > 0.01$

\*For drug users, parents monthly income refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

Hypotheses: *Family Fragmentation is not associated with the development of initial drug use behaviour*

Family fragmentation in the form of either the actual physical loss (Vaillant 1966) or the separation of parents (Rosenberg 1969) has often been noted in the family background of adolescent addicts.

In the present study analysis of data showed that family fragmentation was not associated with the development of initial drug use behaviour (Table 9).

TABLE 9. Initial drug use by family fragmentation  
(N = 383)

Family Fragmentation	Drug Users	Non-Drug Users
Parents Divorced/ Separated Dead	32 17.5%	21 10.5%
Parents Living Together	151 82.5%	179 89.5%
Total	183 100%	200 100%

Chi-square = 3.914; d.f. = 1;  $p > 0.01$

\*For drug users, family fragmentation status refers to the period initial drug use. For non-drug users, this refers to the whole period of adolescence.

TABLE 10. Initial drug use by association with drug-using peers

Association with Drug Using Peers	Drug Users	Non-Drug Users
Peers Using	173 94.5%	60 30.0% 233
No Peers Using Drug	10 5.5%	140 70.0% 150
Total	183 100%	200 100% N = 383

Chi-square = 152.349; d.f. = 1;  $p > 0.01$

\*For drug users, association with drug-using peers refers to the period before initial drug use. For non-drug users, this refers to the whole period of adolescence.

Hypotheses: *Association with drug using peers is not associated with the development of initial drug use behaviour*

Association with drug-using peers during adolescence is among the strongest predictors of adolescent drug use (Hirschi 1969; Nawi Jusoh 1978). In the present study association with drug-using peers was found to be associated with the development of initial drug use behaviour (Table 10). Measurement of the strength of association produced a positive, moderate correlation.

## DISCUSSION

Results of the study clearly indicate that demographic environmental aspects comprising family size, who the individual lives with, educational attainment of both parents, father's occupation, parents' involvement in the work place and family fragmentation are not associated with the development of initial drug use behaviour. The only demographic-environmental aspects found to be associated with the development of initial drugs use behaviour are place of residence and parents' income. Even then, test of the strength of association between the associated variables showed that they are weakly associated. These lead to the conclusion that demographic-environmental variables do not contribute significantly to the development of initial drug use behaviour. This conclusion is in agreement with other drug-related studies (Gorsuch and Butler 1976; Jessor 1979) which found that demographic-environmental aspects were either totally unrelated or were weakly associated with the development of initial drug use behavior.

Conversely, social-environmental aspects are found to be significantly associated with the development of initial drug use behaviour in this study. Specifically, the variable drug-using peers is significantly associated with the development of this behaviour. This is consistent with other studies conducted locally (Navaratnam & Kulamoli 1987; Nawi Jusoh 1978) or outside the country (Lucas et al. 1973; Tolone & Dermott 1975; Kandel et al. 1978). The key role played by friendship patterns and interpersonal relations in providing access to and availability of drugs, and social support for such use have been affirmed in the above-mentioned studies. However, the emphasis on friends and peers as the most important social agent, while supported by research, ought not to result in ignoring individual personality differences.

Most studies of drug use showed, nevertheless, that some proportion of those drug-using friends or acquaintances are *themselves not drug users*. The fact that not everyone behaves the same way in the same context of interaction raises the need for other kinds of explanatory factors. These

factors refer to individual differences not in the social context but in personality. The need to combine these two dimensions, social and personality, was realized in a further study conducted by Abdullah al-Hadi and Mohd. Nasir (1989).

## CONCLUSION

The results of this study has far-reaching implications on drug-use prevention programs in Malaysia. Results that implicated the social environment surrounding the adolescent drug user as having significant association with the development of initial drug use behaviour warrant that intervention programs be carried out at the level of the individual and his social environment.

Intervention of the individual level refers to efforts focussed on the individual to increase the adolescent's ability to counter impersonal pressures that can lead to his initial drug use. Interpersonal pressures are those pressures that originate from an individual's interaction with his peers that use drugs.

The ability of the adolescent to overcome interpersonal pressures can be augmented by creating an awareness emphasizing the significance of various social pressures existing in his surrounding which can lead him to his first experience with drug. Training in social skills should be promoted among adolescents to counter peer pressures that can influence them to try drugs. In the present discussion, social skills refer to the ability to deal effectively with situations that arise from interpersonal relationship. According to Pentz (1985), among the social skills that are important for the adolescent are the ability to voice his opinion assertively, and the ability to say "no".

Interventions at the level of the environment favour those actions that are focussed on changing or weakening the pro-drug environment and introducing and strengthening the anti-drug environment. These interventions should be characterized by actions that alter negative behavioural models existing in the adolescent's social environment (peers that use drugs). These interventions can also be of the type that expose the adolescent to positive behavioural models, and that strengthen positive environmental aspects of the society.

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