

Influence of Connectedness to Parents and Peers on Drug Use among Male Youth

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Introduction

For decades Thailand has been fighting with drug problem; yet the sign of success seems far from sight. Despite increasing awareness and much effort to control it, drug use remains widespread. The recent decades have witnessed mushrooming of variety of substances, ranging from marijuana (*ganja*) and local wild plant called *kratom* (*mitragyna speciosa*) to amphetamine (locally referred to as *yaba*), inhalants, cocaine, ecstasy and other sedatives. Another evidence of severity of this problem is indicated by the fact that the number of new users of young age has been increasing steadily in recent years.

Despite a long recognition of the problem, statistics on drug use in the general public and particularly among youth is limited. What seems certain, however, is that the number of drug users is underestimated. This is so not only because of the illegal nature of drug use but because of social stigma associated with it. So far, several surveys have asked young respondents of their drug experience, and they revealed different numbers and proportions of young people who used drug. The estimated number of students in both public and private schools who involved in any forms of drug (using or selling) was 663,290 in year 2001, was accounting for 12.4% of the total number of 5,365,942 students throughout the country. The largest majority (91%) of those who involved in drug had ever used at least one kind of drug, only 9% were non-users but involved in drug distribution (Abac-Ksc Internet Poll Research Center, 2001).

Epidemiological data suggests that drug use has spread rapidly from adults to young people age under 25 years. For example, statistics from the drug treatment agencies reveals that the number of young patients throughout the country grew since 1996. The number of young patients who sought drug treatment sharply increased from 4,660 or 8.8 percent of all drug dependents who sought treatment in 1996 to 24,610 or 40.5 percent in 2003 (Office of the Narcotics Control Board, 2003; The Department of

Medical Services and the Institute of Health Research, 2004). Needless to say, this is believed to be just the tip of the ice. Drug use among young people continues to be one of the major social problems in Thailand.

In the process of development from childhood to adulthood young people are vulnerable to risk behavior including drug use. Motivations to use drug among young people vary, ranging from the sheer curiosity to showing off autonomy and independence, developing values different from those of parental and societal authority, seeking novel and exciting experiences, and peer pressure. Once young people have tried drug, their chances of being addicted to it is very high. Consequently, this can have tremendous effects on their own lives, their families, and even society as a whole. Such effects include both short-term and long-term problems such as low academic achievement, high school drop out, risk of violence and crime, early sexual initiation, teenage non-marital pregnancy, HIV/AIDS, sickness, and death. Besides, drug use is found to cause dissipation of the bondage of love and warmth in the family which can easily lead to an unhappy and broken family. Realizing these negative consequences, the government and concerned individuals consider drug problem an important national agenda.

Researchers from various disciplines have long been interested in explaining drug use among young people. Such interest has led to a large body of literature which focuses on various individual, psychological, family, and environmental factors related to the onset of drug use. For example, many studies have emphasized significant role of the family variables as a protective factors that keep young people from risk behavior including drug use. Others focused on the influence of peer. Many recent studies that take family and peer as the key factors often make use of the concept of “connectedness” (For example, McCreary Centre Society, 2003; Markham et. al., 2003; Lezin, et. al., 2004).

Since its first introduction in the early 1990s, the concept of connectedness has been increasingly used in various studies to understand youth’s risk behaviors such as sex, violence, and substance use (See, for example, Lee, & Robbins, 2000; Simons-Merton et. al., 1999 cited in King, et. al., 2002; Bonny et. al., 2000; Kirby, 2001; Blum, 2002; Substance Abuse and Mental Health Services Administration, 2002; McCreary Centre Society, 2003; Markham, et. al., 2003; Lezin, et. al., 2004). Results from most of these studies which were carried out in the Western context confirmed the findings of the study by Resnick and his colleagues (Resnick, Harris, & Blum 1993). Essentially,

they point to the conclusion that lack of a sense of connectedness to others often make young people feels that he/she belongs nowhere (Lee & Robbins, 1998 cited in Lee, Keough, & Sexton, 2002), and such feeling reduces self-esteem and self-restraint, and eventually leads to a decision to involve in risk behaviors. On the other hand, a strong connectedness to significant others such as parents and close friends can enhance a sense of belonging which encourages adolescents to avoid risk behaviors. By and large, results from studies in the Western context imply that connectedness is a protective factor for young people.

In Thailand, few studies addressed similar issues; most of them focused on the influence of relationship between youth and parents on drug use (See, for example, Rudtanasadjathum, et. al., 1997; Anuan, 1997; Pinpradit, et. al., 1998). These studies found that strong relationship between youth and their parents could reduce risk of getting involved with drugs. It remains to be investigated in the Thai context how much connectedness to parent and peers works in keeping young people from drug use and other risk behavior; to what extent and under what circumstances peer connectedness influence initiation of drug use.

The present analysis is designed to addresses the above questions by examining whether connectedness to important persons in the youth' life, namely parents and close friends, contribute to understanding of drug use among Thai youth. The main objective is to identify the level and patterns of drug use among the male youth aged 15-24 and to examine the influence of parent connectedness and peer connectedness in this respect.

Our analysis is based on a conceptual framework which anticipates direct influence of parent and peer connectedness on drug use among adolescents and youth. The framework also recognizes significance of related factors other than connectedness to parents and peers. These include individual factors (respondent's age, living arrangement, place of residence, school status, and attitude toward drug), parental factors (parental norm on drug and parent's drug use), and peer factors (peer norm on drug, peer's drug use, and number of drug user friends). In the analytical model, these other factors are regarded as control variables.

For analysis, we set the following hypotheses: (1) Youth who have higher parent connectedness are less likely to initiate drug use compared to those who have lower parent connectedness, and (2) Youth who have higher peer connectedness are more likely to involve in drug use than those who have lower peer connectedness.

Materials and Methods

Study Population and Sample Selection

Target population for this study is male youth aged 15-24 who may or may not have experience of drug use. Here the drugs included marijuana, amphetamine, ecstasy, inhalant, opium, heroin, mitragyna speciosa (*kratom*), and cocaine. Youth aged 15-24 are appropriate target of this study for the following reasons. *First*, young people of these ages are relatively vulnerable to risk behaviors of various forms due to their psychological nature. They often show curiosity to learn and experience new things, especially the ones that give them excitement and fun. *Second*, since youth (particularly those of the younger ages) tend to consider themselves independent from their family control, and at the same time they are often influenced by their close friends and important others, they are less reluctant to adopt the kind of behavior or “model” set by the people to whom they attach high value. Often they do so without carefully weighting its impacts primarily because of lack of knowledge and experience. *Third*, in recent years adolescents and youth have been an important target of national concern regarding drug problem. Available information indicates a rising trend of drug use among Thai youth, and that the age of new users is getting younger. The record from the drug treatment centers showed that the number of new patients under 25 years of age increased from 76.8 percents of all patients in 1996 to 90.8 percent in 2000 (Office of the Narcotics Control Board, 2002). Because of these reasons, the government has recently placed great significance to any measures that lead to understanding of drug use behavior among young people and that can consequently provide ways to keeping young people from being drug victims.

Only male youth are included in the sample of this analysis. Female are excluded not because of lack of interest in this group but primarily because of difficulty in getting sufficient number of female cases in this relatively small sample due to low rate of drug use among them. Recent statistics collected from young people who have ever used any kind of drug shows that of all youth aged 15-24 who ever used any drug only 4.9 percent were female compared to 95.1 percent who were male youth (Office of the Narcotics Control Board, 2001).

Selection of the sample was done by employing the “respondent driven sampling strategy” (RDS). This technique was developed for reaching “hidden

population” who are “hard to reach” for study purpose. Such hidden populations are the people who involve in illegal or sensitive behavior associated with social stigma. Examples of these people include drug users and commercial sex workers. Since it was first developed in the early 1990s, RDS was fairly widely used in a number social and behavioral research. (Heckathorn, 1997; Broadhead, et. al., 1998; Heckathorn, 2002; Heckathorn, et. al., 2002; Heckathorn & Rosenstein, 2002; Johnston, 2005). In Thailand the technique was used by some researchers for their studies of drug users and men who have sex with other men (Sathapana, et. al., 2007).

As a field strategy RDS makes use of a small number of respondents who are carefully selected to reach other respondents in each site. The process is somewhat similar to snow-balling technique which is widely accepted in social science research, but RDS proceeds in a more systematic fashion with appropriate control from the researcher. RDS begins with a small number of eligible cases purposively selected to suit the study objectives. These “starters” are referred to as “seeds”. After interview, seeds are asked to recruit a few other respondents (normally only 3) who share the same criterion characteristics as those of them for interview by the researcher. Thus, if the seeds are drug users, they are instructed to strictly recruit only the drug users who may or may not have any relationships to them. This voluntary act of the seeds is usually compensated, often with a small token of cash, for their time to be interviewed and for the help in recruiting other respondents. In a similar fashion, cases recruited by these seeds are, after interview, asked to act as recruiters to bring in other eligible respondents with the same criterion characteristics as those of them. Like initial seeds, these recruiters are given appropriate compensation. The field process goes on in this manner from one wave of recruitment to the next until the target number of cases is reached, but normally the researcher allows the recruitment to proceed not beyond the fifth wave.

Like other sampling techniques, RDS has important strength and some weakness. It is effective field method for gaining access to hidden populations with unacceptable behavior. Normally, people with such behavior (for example, drug users) have their network which is often difficult to access by most random sampling techniques. It is through such network that RDS allows the researcher to reach target population with less difficulty. Unless the sample size is especially large, it is difficult for the random sampling technique to obtain adequate number of cases for analysis. This strength fits the design of the present study which cannot afford to cover the vast geographical areas with a large sample size, but still gets sufficient number of drug users for a meaningful analysis.

RDS is criticized for not adhering strictly to the principle of random technique for case selection. The RDS procedure involves selectivity in part of the potential respondents and the recruiter. Normally, recruiters invite the people they know or with whom they have connection to participate in the study. The people who decide to participate in the study may differ from those do not in certain characteristics. Inevitable as it may be, this weakness can be reduced by careful selection of seeds. Researcher must make sure that the seeds best meet the study purpose, and that they represent key variations of the target population, for example, in terms of age, schooling status, work status, and experience with drug use.

In the present study, seeds were classified into two groups: youth who ever used illicit drugs at least once in their lifetime, and those who never used any drugs. The seeds were purposively selected with the assistance of community leaders such as local health officers and village health volunteers. These leaders were knowledgeable about the youth in their communities. They were informed about the purpose of the study, and asked to identify youth who met the study criteria and arrange to bring them in for interview. Throughout the field process, 29 male youth were invited as seeds; of these, seventeen ever-used drug and the rest never used any drug in their lifetime.

The seeds who volunteered to participate were interviewed and given a primary incentive. They were asked to recruit others three (3) people who may or may not be their friends but had similar drug experience to that of them to participate in the study. Seeds who *ever used drugs* were instructed to recruit only the youth who ever used drugs. Similarly, those who *never used drug*, were instructed to recruit only the ones who were never-users. The seeds were given a secondary incentive if they recruited other participants exactly as instructed, and not otherwise. A recruits with no drug experience who was introduced by a participant who had drug experience, or vice versa, was not allowed to participate in the study.

To ensure that opportunity for being recruited is not limited to certain group only and to control overrepresentation of some group's members, each recruiter was allowed to recruit up to three peers from their networks and each referral chain of recruitment was allowed to extend not beyond five waves. The process of recruitment at each site continued in this way until no new participant was recruited. In some sites, recruitment was terminated at the end of the second or third wave. On average, recruitment at each site was kept open for at least one week after the first participant (seed) was interviewed.

Once introduced, qualified participants were asked for verbal consent and were informed that their participation is voluntary and that the information they gave would be kept confidential to be used for research purpose only. If agreed, the interview began. Participants were asked to complete the questionnaire by themselves. After these participants finished their questionnaires, the first wave in the RDS process was completed and the initial seeds were given additional incentive for recruiting other participants. The new wave of recruitment then began with those who just finished the questionnaires acted as the new recruiters. In this way, number of recruiters and the recruited increased in subsequent waves until the desired number of cases was reached.

In this study this procedure of recruitment resulted in a sample of 1,184 cases who completed the questionnaire. The recruited sample consisted of youth with drug experience (749 cases or 63.3 percent) and those with no drug experience (435 cases or 36.7 percent). Note that youth with drug experience are oversampled.

Data collection was conducted in two districts of Kanchanaburi province located some 120 kilometers to the West of Bangkok. This province was selected because it represents an appropriate site for research on this subject. Data on drug patients indicates that the overall proportion of drug users who are patients of the public treatment centers in Kanchanaburi (0.5 percent) falls within the range of that found in most other provinces, that is, 0.1-0.5 percent (Office of the Narcotics Control Board, 2001). Another interesting characteristic of this province that makes it an appropriate site for study of this subject is that it is one among popular tourist spots with magnificent landscape and charming beauty including several well-known waterfalls, caves, tranquil rivers, forests, and reservoir. The province attracts a large number of tourists annually both local and from overseas. Normally, in such a tourist place drug can be acquired with relative ease.

In 2003, about 826,169 inhabitants are living in Kanchanaburi, 19 percent of them are in the urban area (Kanchanaburi Provincial Governor's Office, 2007). About 19 percent of the population is youth aged 15-24. Majority of the people are Thai with the Mon and Karen as substantial minorities. In economic terms, Kanchanaburi has been doing well on a national scale, with nearly 10 percent annual growth. Gross Provincial Product (GPP) is 44,380 million Baht in 2000, ranking 20 of the country. Most of the residents of Kanchanaburi engage in agricultural activities. Important industries include sugar, agricultural products and jewelry. Tourism is also one of the

main sources of income for the local people as the province get a large number of tourists each year.

Measurement and Analytical Model

The self-administered questionnaire employed in this study consists of three sections. Section 1 deals with questions on demographic background of the respondents and their drug experiences. Section 2 focuses on information from youth who have experienced drug use, while Section 3 is for the information from those who never used drug. In addition Sections 2 and 3 are also designed to collect information on attitude of the respondents toward drugs, connectedness to parents and peers, parental and peer's norms on drug, and drug use experiences of parents and peers.

Development of questions in the questionnaire was based on the data from two focus group discussions with youth. The questionnaire was pre-tested for reliability on measurement of connectedness to parents and peers. This was done among two groups of students: one group from vocational school and the other from high school. The first group, consisting of 30 male students, was taken to represent those with low connectedness, while the second, consisting of 26 male students from one of the top high schools, was taken to represent those with high connectedness to parents. Results of the pretest revealed high Alpha Coefficient for parent connectedness of both groups; that is, 0.87 for vocational students and 0.93 for high school students. With this level of the Alpha Coefficient the measurement of this key variable was considered reliable.

In the analysis the influence of parent connectedness and peer connectedness on the initiation of drug use will be examined. Drug use includes both lifetime and current uses of any of the following illicit drugs: marijuana, amphetamine, ecstasy, inhalant, opium, heroin, *mitragyna speciosa*, and cocaine.

Key independent variables are parent connectedness and peer connectedness. These are composite variables measured by summing the score from a series of questions designed to illicit information on how close a respondent perceives himself to his parents and his friends. Connectedness, thus, refers to the perceived quality of interpersonal relationship between youth and their significant others; the main dimensions has to do with levels of caring and respect in the relationships and the degree to which youth feel that others understand and pay attention to them (See detail of the measure of parent connectedness and peer connectedness in the Appendix). In

order to understand net influence of connectedness to parents and peers, other variables related to individual youth and their parents and friends are included as control variables in the analysis. These are respondents age, schooling status, living arrangement (whether living with both parents or not), place of residence (urban, rural), attitude toward drug use, parental norm on drug, parents' drug use, peers' norm on drug, peers' drug use, and number of friends who use drug.

Four sets of logistic regression were undertaken by controlling the effect of other variables. Model buildings proceeded by first establishing model of parent and peer connectedness separately. Next, all other control variables, including individual factors, parental factors, and peer factors, were then added to the model of parent connectedness and peer connectedness respectively. Finally, all those variables were entered in the full model to examine the independent effects of parent and peer connectedness. Results of the analysis were presented in the section below.

Results

General Characteristics of the Sample Youth

Table 1 shows that 63.3 percent (749 persons) of male youth in the sample reported drug use at least once in their lifetime while 36.7 percent (435 persons) reported that they never used drug of any kind. Among drug users the majority are of younger age (91 percent aged below 20), living with both parents (60.1 percent), living in urban areas (54.7 percent), currently studying in school (70.5 percent), and have a negative attitude against drug (63.0 percent). Distributions among non-users across the same characteristics are more or less of similar patten, except for the fact that proportions of non-users in many of the same characteristics are greater despite their smaller number.

Table 1: Percent distribution of respondents with different drug experience, by selected characteristics

Individual Characteristics	Drug use (%)	
	Ever used (N = 749)	Never used (N = 435)
TOTAL (N = 1,184 cases)	63.3	36.7
1. Age		
15-19 years old	91.0	85.7
20-24 years old	9.0	14.3
Total	100.0	100.0
2. Living arrangement		
With both parents	60.3	72.9
With father only	5.5	5.1
With mother only	17.1	12.9
With none of the parents	17.1	9.2
Total	100.0	100.0
3. Place of residence		
Rural	45.3	53.8
Urban	54.7	46.2
Total	100.0	100.0
4. Schooling status		
Out-of-school	29.5	27.4
In-school	70.5	72.6
Total	100.0	100.0
5. Attitude toward drugs		
Positive	26.1	12.2
Neutral	10.9	10.8
Negative	63.0	77.0
Total	100.0	100.0

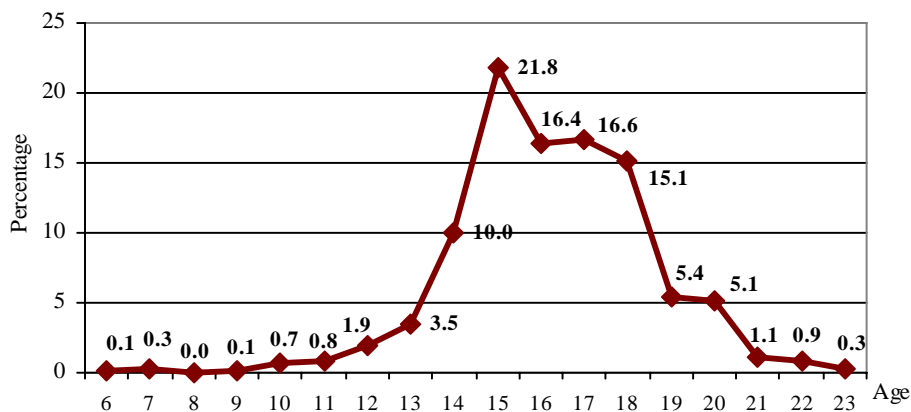
From the results in Table 1 it is difficult to determine with confidence what association exists between drug use and individual background characteristics. What seems to be of interest is that in some characteristics such as living arrangement and attitude toward drug distributions of the sample youth are unexpected. One would expect, for example, that youth who live with both parents and those who have negative attitude toward drug would be less likely to involve in drug use. But the results seem to show the opposite. The same observation applies to schooling status where the result is unexpected. One complications involved here seems to be embedded in the sample which was dominated by the youth with drug experience. Furthermore, distribution of the sample within each characteristic is not even. For example, with regard to living arrangement proportions of youth living with both parents are predominant; similar distributions are observed in schooling status and attitude toward drug. Such distributions of cases in the sample make it difficult to draw a conclusion from the findings.

Initiation of Drug Use

Among 745 respondents with experience of drug use the age at first use ranged from 6 to 23 (Figure 1) with an average age at first use of 16.2. It can be seen from Figure 1 that drug use begins quite early; for some youth this happens well below age 10. Among users the first try during early adolescence years rises sharply and reaches the peak at age 15 where about 22 percent of youth had used drug for the first time. After age 15 the proportions using drug for the first time falls but remain substantial until age 20. By age 23 the proportion involved in drug for the first time is minimal. According to the finding in Figure 1, the period between ages 15 and 19 is the most vulnerable time for youth regarding drug initiation. During this period three-fourths of the users in our sample had already tried some drug for the first time, comparing to less than 17.4 percent in the period before age 15 and only 7.4 percent after age 20.

This finding suggests a significant policy implication. Since drug use among most of the sample youth begins in adolescence years, it calls for the program activities to pay special attention to adolescents as a target of intervention. If male youth in adolescent years can be kept away from drug, it is more likely that they will not turn to it in their later ages and possibly through the rest of their life.

Figure 1
Proportions of youth in the sample who ever used drug, by age at first use. (N=745)



With regard to type of drug, Table 2 shows the number and percentage of youth in the sample by type of drug at first use. Majority (41.3%) of the users reported that their first drug was amphetamine; this is followed by those who reported mitragyna speciosa (20.1%), marijuana (17.2%), and inhalant (13.7%), respectively as their first drugs. Youth who began with other hard drugs (ecstasy, opium, heroine and cocaine) account for 7.7 percent of all users. The highest proportion of youth who began with amphetamine implies that this drug is more easily available, less expensive, easy to acquire, and easy to use (Office of Narcotics Control Board, 2004).

Table 2: Number and percentage of respondents by type of drug at first use

Type of drug at first use	Number	Percent
- Amphetamine	308	41.3
- Mitragyna speciosa (<i>Kratom</i>)	150	20.1
- Marijuana	128	17.2
- Inhalant	102	13.7
- Ecstasy	25	3.4
- Opium / Heroin	18	2.4
- Cocaine	14	1.9
Total	745	100.0

Male youth in this study referred to various reasons for trying drug but the most important one is curiosity to know about drug which accounts for 67.5 percent of all users. This finding is not surprising because adolescents often seek a new exiting experience. If they are motivated or are told how fun drugs are, they tend to want to taste them (Philip, 1990). They could experiment with drug as part of an experience that introduces them to new feelings and sensations without being aware of the problems such as drug dependency that may follow (United Nations, 2005). Other reasons for trying drugs include family problem (1.7%), peer pressure (25.2%), relieving stress or heightening enjoyment (4.7%). and autonomy and independence (1.0%).

Parent and Peer Connectedness

As already mentioned above (See section on “Measurement and Analytical Model”) parent connectedness and peer connectedness, our key independent variables, are measured by summing of scores for the questions especially designed for obtaining

the respondents' perception of closeness to their significant others, namely parents and friends. The perceived connectedness scale ranged from 1 to 5, with a mean score of 3.56 for parent connectedness and 3.55 for peer connectedness respectively. Older youth (aged 20-24) had a little higher score of perceived connectedness to parents (mean score of 3.72) than the younger ones (aged 15-19), who had an average score of 3.54. On the contrary, perceived score for peer connectedness, is higher among younger youth than among the older ones, with average scores of 3.56 and 3.52 respectively (Table 3).

Table 3: Mean scores of connectedness to parent and connectedness to peers among male youth in the sample, by experience of drug use.

Characteristics	Number of valid cases	Mean	
		Parent connectedness	Peer connectedness
TOTAL SAMPLES	1,049	3.56	3.55
Age			
15-19 years old	932	3.54	3.56
20-24 years old	117	3.72	3.52
Drug Use			
Yes	614	3.37	3.59
No	435	3.83	3.50

Another finding in Table 3 is especially worth noting. The mean scores of parent connectedness are significantly different between youth who had drug use experience and those who did not, with the non-users showing higher parent connectedness score than the users. Regarding peer connectedness, the users and non-users differ but only a little with the user group showing slightly higher score. Overall, the findings seem to suggest that drug use is associated with low connectedness to parents and high connectedness to friends. On the contrary, non-use of drug is associated with high connected to parents and low connectedness to friends. It remains to be further analyzed whether this observation is confirmed. And for this, we turn to a logistic regression analysis, results of which are presented in the next section.

Influence of Parent and Peer Connectedness on Drug Use

To determine the net effect of parent connectedness and peer connectedness on drug use logistic regression analysis is carried out and results are presented in Table 4. In this Table, first, the effect of parent connectedness and peer connectedness are presented without taking into account effects of other variables as seen in Model I. Next, each set of control factors is added to subsequent models, namely, individual factors (Model II), parental factors and peer factors (Model III), and finally, in Model IV all other control variables are added to determine net effects of predictor variables (parent connectedness and peer connectedness) on the odds of drug use among the sample youth.

The results of the Model I show strongly and statistically important effects of parent connectedness and peer connectedness on respondents' drug use. The logistic coefficients show that increase in parent connectedness reduces the odds of drug use by 67%. In contrast, an increase in peer connectedness raises the odds by 79%. These are of course expected and consistent with the previous research reviewed earlier. The result is also not different from the finding from bivariate analysis presented in Table 3 above.

Table 4: Logistic regression coefficients assessing relationship between parent and peer connectedness, and the risk of drug use initiation among youth, controlling the effect of individual, parental, and peer factors.

Group of Explanatory Variables	Model I		Model II		Model III		Model IV	
	Independent variables		Independent variables & Individual factors		Independent variables & Parent and peer factors		All explanatory variables	
	B	Exp.	B	Exp.	B	Exp.	B	Exp.
INDEPENDENT VARIABLES								
1. Parent connectedness	-1.13***	0.33	-0.93***	0.40	-0.60***	0.55	-0.53**	0.59
2. Peer connectedness	0.59***	1.79	0.56***	1.76	0.73***	2.07	0.67***	1.96
CONTROL VARIABLES								
A. Individual Factors								
1. Age	-	-	-0.04	0.97	-	-	-0.08	0.92
2. Living arrangement								
Both parents (ref. category)								
Only father	-	-	-0.01	0.99	-	-	-0.27	0.76
Only mother	-	-	0.31	1.36	-	-	0.42	1.52
Without parents	-	-	0.51*	1.67	-	-	0.25	1.30
3. Place of residence								
Urban (ref. category)								
Rural	-	-	0.33*	1.39			0.10	1.10

Table 4: (Continued)

Group of Explanatory Variables	Model I		Model II		Model III		Model IV	
	Independent variables		Independent variables & Individual factors		Independent variables & Parent and peer factors		All explanatory variables	
	B	Exp.	B	Exp.	B	Exp.	B	Exp.
4. School status								
In-school (ref. category)	-	-	-0.18	0.83	-	-	-0.22	0.80
Out-of-school	-	-	-0.59***	0.55	-	-	-0.23	0.80
5. Respondents' attitude toward drugs								
B. Parent Factors								
6. Parental norm on drugs	-	-	-	-	0.02	1.02	0.10	1.10
7. Parent's drug use behavior								
Ever (ref. category)	-	-	-	-	1.54***	4.68	1.56***	4.75
Never	-	-	-	-	-0.52***	0.60	-0.48***	0.62
C. Peer Factors								
8. Peer norm on drugs	-	-	-	-	3.23***	25.30	3.19***	24.39
9. Peer's drug use behavior								
Ever (ref. category)	-	-	-	-	0.02	1.02	0.01	1.01
Never	-	-	-	-				
10. Number of drug user friends	-	-	-	-				

Note: * P<0.05, ** P<0.01, *** P<0.001

When individual factors and parental and peer factors are added in Models II and III, strong and significant influences of parent connectedness and peer connectedness on drug use remain unchanged. The results become clearer when all control variables are included in the final model (Model IV). Here the influence of both predictor variables, net of the influence of other control variables, remains generally unchanged except for a small decline in significance level of parent connectedness. Results in Model IV clearly show that youth who have strong connectedness to parents are 41 percent less likely to involve in drug use when compared to those with weaker connectedness. Connectedness to peers, on the other hand, shows a different opposite influence. Youth who have strong connectedness to friends are 96 percent more likely to use drug when compared to those who have weaker connectedness. This finding leads us to accept our two hypotheses that youth with higher parent connectedness are less likely to use drug compared to those who have lower parent connectedness, and that youth who have higher peer connectedness are more likely to involve in drug use compared to those with low peer connectedness.

Conclusion and Recommendations

This study was designed primarily to investigate the influence of parent connectedness and peer connectedness on drug use among male youth. The key findings from logistic regression analysis show strong association of drug use (or non-use) with connectedness to parents and peers. More specifically, an increase in the level of connectedness to parents tends to reduce the odds of drug use among the youth. On the other hand, an increase in the level of connectedness to friends increases the likelihood of involving in drug. This strong association of drug use with parents and peer connectedness is statistically significant even when effects of all other variables are controlled. Our findings in this respect confirm the findings of many studies in Western societies which suggest that strong connectedness to family keeps youth from risk behaviors including drug use, while strong connectedness to friends, especially those who have positive drug norm and/or who involve in drug use, tends to lead young people to use drug (Conger & Reuter, 1996 cited in Garnier & Stein, 2002).

There is not much to doubt about the influence of parent connectedness in keeping the youth away from drug and other risk behaviors. It is less likely that youth who are close to parents would easily be induced to drug or other risk behaviors. With strong connectedness to parents, youth are aware of their importance to parents as much as that of their parents to them. Such awareness can help young people restrain themselves from risky and harmful acts.

But why does peer connectedness not have the same influence as that to the parents? Why does strong connectedness to friends tend to lead to drug use? Data in hand now do not allow us to fully address this question. In the absence of data, we can only speculate about the way peer connectedness works. To begin with, it is widely known that adolescence is a transitional period when young people are changing from childhood to adulthood. Significance in the process of this transition is psychological changes in which adolescents not only seeks more freedom and autonomy from parents but also show greater interest in the world outside the family. For most young people no other people outside the family are more important than their friends. What this implies is that youth may be persuaded by friends to take risks of various forms including drug for sheer excitement or curiosity. Of course, in some cases, youth may be the one to persuade others in his peer group to try such things. Whatever the situation, many youth may get involved in the risk behavior for lack of experience and life skills. There are, of course, good friends who can save youth from risk, but among those who are victims of drug and other risks they often have friends who are like them.

Another finding from this analysis, also of interest, is that connectedness to parents and peers differ between younger and older youth. For the younger youth, peer connectedness is of higher level than parent connectedness; the opposite is the case for the older youth. Again our data in this respect are not sufficient to explain this difference. We propose that this has to do with the level of maturity which varies with age of individuals.

Given the key findings presented above, two points that may have policy implications emerge. They are presented below.

1. *Early onset of drug use:* The results above show that by the age of 19 three-fourths of youth with drug experience had already tried some drugs. From age 20 and later fewer youth involve in drug. To the extent that this finding represents reality, or is close to reality in the wider youth population, it raises concerns for parents, family, and other institutions including governmental and non-governmental organizations that work for the welfare of youth. There is an urgent need to protect young adolescents and youth from the harm of drug. Successful program should target adolescents, especially those in their mid-adolescent years, for intervention. In fact, this supports what many concerned organizations have been trying to do.

2. *Different influence of parent and peer connectedness:* Our results show that high connectedness to peers tends to induce youth to drug while high connectedness to parents tends to protect them from it. This finding is important. On the one hand, it suggests that any program and activities that enhance high level of connectedness to parents and family should be promoted. Programs may address the processes that directly encourage parents and young children to keep close relationship with each other. Joint activities or spending time talking together, paying attention to children, trust, and acceptance of children's decision should be created and promoted in the context of family. All of these may encourage youth to perceive the strong ties and connectedness to their parents which may keep them away from risk behavior such as drug use.

On the other hand, since adolescents begin to develop strong desires for greater freedom and independence, they tend to become increasingly connected to their friends and hence can be less connected to parents. While it is important to recognize this, youth should be closely supervised in selecting and associating with friends. In school youth should be educated on how to choose good friends as they can lead to doing good things and to resist negative behaviors. For this purpose, useful life skills may be taught to young people not only at home but also in school and other environment.

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Appendix

Measure of Independent Variables

- **Parent connectedness:**

The measure of parent connectedness consists of seven questions to assess the degree to which youth feels close to parent, feels understood, and cared for by their parents. For youth who ever used drug, parent connectedness was assessed retrospectively referring to the timing before or around the time (in this case, age) when they first tried any drug. And if the participants live without biological parents, they were asked for the connectedness to their guardians instead of parents. Statements included in the questions for this measure are:

1. *How close do you feel to your father/mother/guardian?*
2. *How much do you feel that your father/mother/guardian pays attention to you?*
3. *How much do you feel that your father/mother/guardian is warm and loving you?*
4. *How much do you feel that your father/mother/guardian understands you?*
5. *How much do you feel safe when your father/mother/guardian are with you?*
6. *Are you happy to be with your father/mother/guardian?*
7. *How much do you feel that you are important for your father/mother/guardian?*

In interview the respondents were asked to report how best each of these statements described what they perceived as the fact in the relationship with their parents/guardians. A five-point scale was provided as response categories ranging from 1 (not at all) to 5 (the most or best). The responses were combined to get an average index, the value of which ranges from 1.0 – 5.0 (each item ranges from 1.0 to 5.0). A high score indicates that the respondent perceived high connectedness to their parents.

- **Peer Connectedness:**

The measure of peer connectedness assesses the degree to which youth feel close to their friends. Like parent connectedness, for youth who ever initiated drugs peer connectedness was assessed retrospectively, referring to the timing (age) before or around the time when they first used it. This measure consists of six items which include:

1. *How intimate do you feel to your close friends?*
2. *How much do you feel that your close friends care about you?*
3. *How much do you feel you were important to your close friends?*
4. *How much do you feel you are loved by your close friends?*
5. *How much do you feel your friends understand you?*
6. *How much do you feel that your close friends make you happy?"*

A five-point scale was used as response categories where 1 referred to “not at all” and 5 to “the most or best”. The responses were combined to determine an index of peer connectedness (score ranges from 1.0 to 5.0), with a high score indicating the higher connectedness to their close friends.