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The Social Control Model on the Risk of Adolescent Drugs Abuse

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Abstract--- *The increasing national prevalence of drug abuse among adolescents in Indonesia highlight the need for an empirical model for effective social control. The aim of this study was to test the model originating from the social control theory, consisting of attachment, involvement, commitment, and belief. A sample of 241 high school students age between 15 – 17 years were selected using stratified sampling completed a cross sectional survey. Instrument used comprised of demographic information and measures of parental attachment, peer attachment, school commitment, and leisure time activity preference. Result of the Structural Equation Modell (SEM) showed that factors within the family, peer, and school settings significantly contributed towards the risk of drug abuse among adolescents. In the family setting, there is a difference between paternal and maternal attachment among at risk adolescents. Maternal attachment was found to be a stronger predictor in at risk adolescent. Therefore, preventive interventions on adolescents at risk of drug abuse should emphasize on developing strong bonding between mothers and child to control them from being influenced by external factors.*

Keywords--- *Drug Abuse, Risk Factors, Social Control, Adolescent.*

I. INTRODUCTION

Drug abuse is one of the major social problems in Indonesia. Research indicates the increasing cases of drugs abuse recorded by drug abuse agency in Indonesia (National Narcotics Agency of the Republic of Indonesia/ NNARI on 20012-2016 showed a raise (42, 7%; 161, 22%; 66, 14%; 36, 05%). The increase in average drug abuse cases was 71.62%. One of the events on the 2018 was found 1.6 tons of methamphetamine in the Riau islands. If 1.6 tons of methamphetamine is consumed by the next generation, broken the order of civilization on the nation's life.

High prevalence of drugs abuse demanded further study to grasp the comprehensive understanding on drugs abuse. The prevalence would be an important source to monitor high-risked adolescent as drugs users. Fisher (2003) stated that 45% of participants tried to use drugs and 32% adolescents of them continued and kept using drugs. Essau (2011) found that 36% of 1035 of are at high risk of drugs abuse. The increasing number of drugs abuse (Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002; Mohler-Kuo, Lee, & Wechsler, 2003; NNARI, 2017) showed that the drugs abuse was a global problem and the raise complicated vision, *Indonesia Free Drug Abuse.*

The problem of drugs abuse generally stem from complex factors in the environment including the family, peers, and school (Akers, *et al*., 1979 ; Dishion, *et al*., 1999; Kaplow, *et al*., 2002; Davis, *et al*., 2004; Bernes, *et al*., 2006; Drapela, 2006; Akers, *et al*., 2007; Calafat, *et al*., 2008; Connell, *et al*., 2010; Fleming, *et al*., 2010). The

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phenomenon of drugs abuse could be explained through Social Control Theory (SCT). Social Control Theory was use to developed through the concept that social factors had the influence as the control when diverged behavior emerged, including the risk of drugs abuse. Social Control Theory was used to understand drugs abuse behavior by Bahr, *et al.* (2005); Begue & Roche. (2008); Chriss (2007); Durkin, *et al.* (1999); Giodarno (2012); Krohn & Massey (1980); Lin & Dembo (2008); Liska & Reed (1985); Marcos, *et al.* (1986); Nakhaie, *et al.* (2000); Ozbay & Ozcan (2006); Warr (1993); Yu & Gamble (2010); Wiatrowski, *et al.* (1981). The social control used in they study were oriented towards western culture. Including, how adolescents in establishing attachment, involvement, commitment, and belief in the rules, were different among Indonesia.

Attachment referred to form of proportional affection between an individual to another individual or to institution. Hirschi (1969) stated that on individual who tended to have psychopathic attachment have the tendency to the absence of attachment to others. Attachment became protective factor (Elgar, *et al.*, 2003; Thorberg & Lyvers, 2009; Krohn & Massey, 1980; Marcos, Bahr, & Johnson, 2001; Sokol-Kazt, Dunham, & Zimmerman, 1997; Stacy, 2006).

Hirschi's (1969) explanation supported by Krohn and Massey (1980) stated that the commitment in social organization will make an individual avoid discomfort when s/he was involved in diverged behavior or criminality. Commitment was a rational component in a relationship. This referred to how far children were involved in conventional activities of a group. An individual's commitment by not doing a violation was due to the fact that they knew they would be in trouble, which might disrupt their chance of success. This was able to form if there was a group where children attached themselves in.

Children's involvement was related to how much time the spent to interact with another individual in one activity. Involvement in conventional activities became the part of control theory. The study done by Akers & Lee (1999); Bahr, Hoffmann, & Yang (2005); Krohn & Massey (1980); Marcos, Bahr, & Johnson (2001); Traag, Marie, & Velden (2006) with the concept of TKS, however, they did not include involvement dimension. Akers & Lee (1999) and Krohn & Massey (1980) included involvement dimension in commitment, because in the commitment was also demanded on how far they were involved. Involvement is an activity needed to show the commitment.

Social Control Theory assumed the belief of rules was violation of values system in the society or in group. If the violation of the value systems was a form of commitment, it was not explained in SCT. The process of research done by Hirschi (1969, in Giodarno, 2012) found that someone who did not believe in the existence of laws and rules they should be obeyed had bigger chance to be involved in diverged behavior. Krohn & Massey (1980) stated that belief dimension had the biggest contribution to predict behavior.

Involvement and belief dimension in the development of SCT studies was not as many as the studies in attachment and commitment (Young & Brucklen, 2011). Dimension of belief in all studies of SCT was the mediator bridging attachment, commitment, and involvement. Dimensions in TKS in this study became the external factors, which were applicable to adolescents. The external factors, if they were not managed appropriately, would affect the emergence of the risk of drugs abuse. The changing and sometimes unexpected external factors disabled people from controlling them. The understanding of this pattern would depend on SCT, where they emphasized on the

external influences, instead of internal ones. The external factors were the attachment between father-children, between mother-children, the belief of the existence of rules, commitment on study, the involvement of spare time activities, and peers attachment. Based on the explanation of literature review and previous studies, the aim of the article is to analyze social control model on the risk of adolescent's drug abuse.

II. METHODOLOGY

Study Design

This study is a descriptive investigation research to establish a model and to validate the model's goodness of fit by integrating the factors such as family, school, peer, and smoking on the SCT model.

Setting and Sample

The target population of this study was Indonesia adolescents, and the accessible population was male and female high school students who at risk drug abuse in Sragen, Central Java. We selected participants for a survey as follows:

1. Adolescents who agreed to participate in the study with informed concern;
2. Adolescents who listed as active students
3. Adolescent who has mother's and father's live
4. Adolescents who selected risk drug abuse with Drug Abuse Screening Test (DAST-10) whose score was 1-10, not score zero for DAST;

Note that there is no precise standard for selecting the sample size in the structural equation model. However, the recommended sample size is 200 and higher. If the sample size is larger than 400, the structural sensitivity significantly increases. Then, a small difference in input may create a huge difference in the result in terms of the fitness level. This sometimes acts as a hurdle for obtaining a suitable structural model. This is the reason why we intended to use the sample size of 200-400 participants.

The distributed questionnaire was collected from 751 students who agreed to participate in this study and on risk drug abuse communities. Among them, this study targeted the students belonging to the risk drug abuse and selected 241 students. Of the 571 students, 494 (65.8%) students were in the normal group and 257 (34.2%) students were in the potential risk drug abuse group, including the students who haven't a father and mother. Of the 241 students, 179 (74.3%) students were in the low risk drug abuse, 50 (20.8%) students were in the intermediate risk drug abuse, 7 (2.8%) students were in the substantial risk drug abuse, and 5 (2.1%) students were in the severe risk drug abuse.

Other sample characteristics, 79, 3% of the sample were male students and 20, 7% female students at risk. The analysis of the survey shows that 91, 3% of the respondents were that live with parents. Slightly over one fourth of all survey participants have mother with secondary level education (26, 1%) and 32% father's. The largest percentage of parents' education level is elementary school (32% father and 44% mother elementary school level education). Adolescents spend a lot of free time with his/her friends (64, 2%).

Measurements

To measure the internal correspondence of the questionnaire scales, Cronbach alpha (α) coefficient was counted,

based on correlation of opposing core statements in the questions and on the degree of revealing the issue under the analysis through proposed statements.

Self-reflection at Risk Scale (SRR)

To measure risk drug abuse, this study used three domains: school performance, friendships performance, and self-performance. This scale consisted of eight questions and each question used a 4-point scale. The response range was from 1 point (never) to points (always). A higher score meant higher risk for drug abuse. Cronbach a was .90 for the study.

Mother–child Attachment (MCA)

To measure the level of mother–child attachment, authors have used the Mother– child attachment scale (MAS). The tool consists of three subdomains: trust, communication, relation; consists of 7 questions and each question uses a 4-point. The response range is from 1 point (not very so) to 4 points (very so). A higher score means a higher level of mother–child attachment. Level. Cronbach a was .81.

Commitment for at School (CSS)

This study used the commitment for at school scale (CSS) and the perceived student's scale to quantify school function for commitment. The scale consisted of eight questions and used a 4-point. The response range was from 1 point (not very so) to 4 points (very so). A higher score meant more school commitment higher. Cronbach a was .72 for the study.

Involvement in Leisure Time (ILT)

To measure involvement in leisure time, this study used the scale a self-reporting questionnaire. The scale consisted of 7, three domains: availability of place, frequency visit on place, subjective norms; and each question used a 4-point. The response range was from 1 point (not very so) to 4 points (very so). A higher score meant higher involvement in leisure time. Cronbach a was .71 for the study.

Father-child Attachment (FCA)

This study based on the results of the author's literature review. The scale consisted of 7 questions and three areas: trust, communication, relation. Each question used a 4-point scale. The response range was from 1 point (almost not so) to 4 points (always so). A higher score meant a better father-child attachment. Cronbach a was .86.

Belief of Outside Rules (BOR)

This study used the belief of outside rules scale and the perceived adolescent's perceptions of applicable rules. The scale consisted of three dimensions: knowledge, rule implementation, evaluation; seven questions; and each question used a 4-point. The response range was from 1 point (not very so) to 4 points (very so). A higher score meant more positive belief of outside rules. Cronbach a was .75 for the study.

Peer Attachment

To measure peer attachment, this study used the peer attachment scale developed by authors. The scale consisted 8 questions and three areas: trust, communication, relation. Each question used a 4-point scale. The response range

was from 1 point (almost not so) to 4 points (always so). A higher score meant a better peer attachment. Cronbach a was .73 for the study.

Smoking Behavior

Smoking behavior is the frequency of smoking carried out by adolescents based on self-report. A high smoking behavior score indicates always smoking until zero indicates no smoking.

III. ANALYSIS

This strategy of analysis seems an appropriate way to build up empirically an explanatory social control model by Structural Equation Model (SEM) with AMOS 19.0. In this study using statistical tools:

1) Percentage was used to analyze participants' demographic characteristics and research variables' features.
2) The correlations between study variables were analyzed with Amos Program's concept correlation matrix.
3) Maximum likelihood estimate was used for the hypothetical model's goodness-of-fit and hypothesis validation. The model's goodness of fit was evaluated using X^2 statistics, goodness-of-fit index, adjusted goodness-of-fit index, comparative fit index, normed fit index, incremental fit index, root mean square residual, and root mean square error of approximation.

Ethical Approval

This study was approved by the empirical studies in a Sragen area, Central Java. Written informed consent was required before participation. Data were made anonymous through the transcribing process, by moderating or removing details that could entail the risk of participants being identified.

IV. RESULT

Table 1: Shows the General Characteristics of the Participants in this Study as for Age, most of the Students were Aged _16 Years: 13

Characteristic	*Level*	*Frequency*	*Procentage*
Risk drug abused	Low	179	74,3 %
	Intermediate	50	20,8 %
	Substantial	7	2,8 %
	Severe	5	2,1 %
Sex	Male	191	79,3 %
	Female	50	20,7 %
Living	Parents	220	91,3 %
	Family	21	8,7 %
Father level education	No grade	5	2,1 %
	Elementary school	77	32,0 %
	Junior high school	52	21,6 %
	Senior high school	77	32,0 %
	Graduated	30	12,4 %
Mother level education	No grade	7	2,9 %
	Elementary school	106	44,0 %
	Junior high school	45	18,7 %
	Senior high school	63	26,1 %
	Graduated	20	8,3 %
Close friend	Risk of drug abused	105	43,6%
	No Risk	136	56,4%
Spending free time	Alone	21	8,7%
	Close friend	75	31,1%
	Friends on group	77	32,0%
	Family	50	20,7%
	Adult friend	18	7,5%

Majority of the respondents on the risk of drug abuse was considered as low and did not need intensive treatment, there were only 1% who needed the treatment. Generally, males were more prone to the risk (79.3%) and lived with their parents (91.3%). If it was seen through the parents' education, both father and mother were still less-educated, the highest percentage of father's education level were at elementary school and senior high school. On the other hand, most of the mothers were elementary school graduates. Furthermore, the subjects spent most of their time with their friends and non-family members.

The results of DAST-10 calculation as subject selection instruments obtained empirical mean results of 2.1369; empirical standard deviation 1, 78941; hypothetical mean 5, and hypothetical standard deviation 1.7. Comparison of these figures shows that the behavior of adolescents at risk of drug abuse is relatively low and tends to be homogeneous. Data description of each research variable exposed in table 2.

Table 2: Empiris and Theoretic Score

Variable	*Empiris score*				*Theoritic score*			
	Min	Maks	Mean	SD	Min	Maks	Mean	SD
Risk Drug abused	0	50	165311	873213	0	72	36,00	12,0
Friends Attach	8	24	158008	341592	0	24	12,00	4,0
Commitment	2	24	162490	406769	0	24	12,00	4,0
Belief in rules	0	21	137801	399445	0	21	10,50	3,5
Leisure Time	1	19	96432	341279	0	21	10,50	3,5
Mother Attachment	2	21	139129	426965	0	21	10,50	3,5
Father Attachment	2	21	125560	356808	0	21	10,50	3,5
Tobacco	0	3	0,7344	100209	0	3	0,75	0,5

The comparison between empirical average and theoretical average, and the empirical and theoretical deviation standard. The schools' commitment factor, the belief of the existence of outside rules, the attachment between mother-children, between father-children, and the smoking behavior showed varied subjects' respond. The factor of involvement of leisure time activities showed varied average of subjects' respond. Whereas, the tendency of the risky behavior of drugs abuse and the attachment between peers showed homogenous subjects' respond.

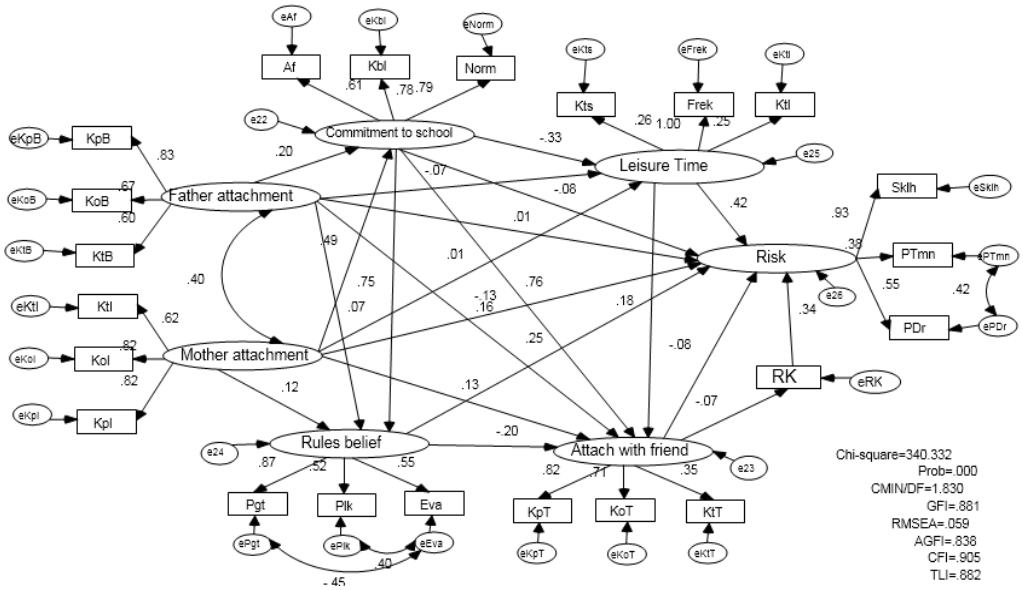

Figure 1: The Model of Social Control Theory of Teen's Behavior Risk of Drug Abuse

The theoretical and empirical model that social control model on adolescent's behavior risk on drug abuse (Figure 1) could be explained through external factors such as attachment between father-children and mother-children, school's commitment, the belief of outside rules, peers' attachment, involvement of leisure time activities, and smoking habits.

There was a direct effect, which was the similarity of the models, which was the direct effect on the involvement of leisure time activities and smoking behavior to the risky behavior of drugs abuse, and the influence of the attachment between mother-children to the schools' commitment and the effect of schools' commitment to the belief of outside rules.

Pattern of attachment between father-children would be optimal as the protection of risky behavior of drugs abuse if it was accompanied by social control, which included schools' commitment, the belief of outside rules, peers attachment, and the involvement of leisure time (the comparison between the estimation of direct effect with indirect effect). Different point was shown at the attachment between mother-children, where the attachment was good as the social control institutions had bigger direct effect rather than indirect.

The involvement of leisure time activities as the bridge, which had indirect estimation effect was higher than direct influence between the schools' commitment to the risky behavior of drugs abuse. This meant that the involvement of leisure time activities had to be given to the adolescent and managed well, hence the schools' commitment as social control institutions were able to prevent the risk behavior of drugs abuse.

V. DISCUSSION

Adolescent's behavior, especially, which was at risk of drugs abuse, could not be understood individually. Social interaction and social system would become important information to understand adolescent, especially, would benefit the intervention program. Relationship between adolescents and parents, with academic activities at school and direct or indirect interaction between peers sometimes posed a problem. Hence, it needed a social understanding of adolescent.

This study supported Mayberry, et al.'s (2009) findings stating that drugs abuse was influenced by external factors, especially by the family, which was consisted of values implantation by parents, parents' support, parents' knowledge, peers influence, and school nuance. The findings also supported Park, et al.'s (2009) studies, which showed that the level of risk of drugs abuse was also determined by the source of social support, whether parents (parents who consumed alcohol, parents' support) or peers (peers with risk and peers' support). Parents' support influenced more rather than the influence from parents who consumed alcohol. The findings showed the strength of social control theory.

Predicted analysis of the factors of family, school, and friendship on the behavior of drugs abuse risk was conducted by Fleming, *et al.* (2010) on two age groups; they were 5-8 and 9-12 education level. How big the risk of drugs abuse when they were 19 years old. The deteriorating family condition and the decreasing of schools' commitment on 5-8, on year 9 showed the increasing risk of drugs abuse and it kept rising on the age of 19 under the influence of peers. Longitudinal research for approximately seven years done by Fleming, *et al.* (2010) was strengthened as they found social control model for the risk of drugs abuse, which also focused on external factors.

In addition, the findings of this study are reinforced by Krane & Klevan (2019) who demonstrate that home and school are pivotal contexts in the lives of upper secondary students, and contribute to the development of a tripartite relationship between teacher, student, and parent. Parental involvement is described as crucial, especially for students at risk. The study calls for awareness of how positive teacher, student, and parent in upper secondary school can be developed.

The strong external factors, which fit the social control theory could be seen through R square between social control model of adolescent's risky behavior of drugs abuse with the social control model for adolescent who were not, which reached 50.1% versus 8.2%. This could be interpreted that external factors could be optimalized as protection factors on the risk of drugs abuse, which were the attachment of father-children, between mother-children, schools' commitment, the belief of outside rules. Moreover, risk factors could be minimized, which were the involvement of spare time activities and smoking behavior. On the conceptual theory of Hirschi (1969, 2002), his findings showed the weakness of social control function.

The explanation above showed the importance of understanding the external factors on the risk of drugs abuse. Individual clinical concept implemented in the intervention process, especially preventive program, sometimes discomforted the adolescent, because they were 'labeled' and became objects who were expected to change. The findings strengthened that the interacted external factors were important to be managed. This matched to Hirschi (1969, 2002) who stated that social control consisted of institutions, either family (the attachment between father-children, between mother-children), school (schools' commitment), friendship (peers attachment), and society (the belief of outside rules).

The model of risky behavior on drugs abuse found could present the explanation of such action based on the social control theory (Bahr, *et al.,* 2005; Begue & Roche., 2008; Chriss, 2007; Durkin, *et al.,* 1999; Giodarno, 2012; Krohn & Massey, 1980; Lin & Dembo, 2008; Liska & Reed, 1985; Marcos, *et al.,* 1986; Nakhaie, *et al.,* 200); Ozbay & Ozcan, 2006; Warr, 1993; Yu & Gamble, 2010; Wiatrowski, *et al.,* 1981). The adolescent's risky action of drugs abuse in the perspective of social control theory was a form of diverged behavior, which was influenced by the chance of the risky behavior such as being late, truancy, skipping classes, being called to teacher's office for disobeying the rules, disregard one's cleanliness, disregard the environment, leaving old friends without any reason, and being stingy. Basically, adolescent realized the existence of control institutions, which were family and school. This matched the subject description that the attachment between father-children, between mother-children, schools' commitment, and the belief of outside rules was considered high; however, the control did not show its function, because it did not influence the risk of drugs abuse, it could be said that the social control system was weak or malfunctioned (Hirschi, 2002).

The discrepancy of the condition was due to the fact that adolescent had spare time. The involvement of how they spent their spare times contributed the risk of drugs abuse. The findings supported Herman (2005) who stated that spare time activities, which was filled with negative activities added the chance of drugs abuse for 26.62 times bigger; Steketee, Aussems, Toorn & Jonkman (2010) explained that by spending spare time with activities that raised the risk of drugs abuse was going to discotheque, alcohol, becoming gang member, befriending bad people,

and spending more time with friends. The same condition also raised in this research was spending more time with friends, either in big group or in small group (in pair).

The study conducted by Igra & Moos (1979, in Durkin, *et. al.*, 1999); Durkin *et. al.* (1999) found that the involvement of spare time activities influenced drinking alcohol behavior. In Indonesia, alcohol was included in addictive substances. Related to spare time, Barnes *et al.* (2007) mentioned specifically that exercising in spare time could reduce the consumption of cigarette, alcohol, narcotics, and other negative activities. Afandi, *et al.* (2009) with the analysis of logistic regression found that spending spare time with negative activities had higher chance of drugs abuse. Rivera & McCorry (2007) supported by conducting experiment on spending spare time after school could reduce mischievous behavior and drugs abuse. Fourie, Slabbert, & Saayman (2011) found that the way male and female spent their spare time was different. Therefore, there needed system or rules for spending their spare time. However, the findings showed that the belief of rules was strong enough, but it was not influential to the risk of drugs abuse. The belief of written rules was only understood for their knowledge, but it was still obscure on the risk of drugs abuse.

According to Gryczynski & Ward (2011), the existing rules in religion would also affect smoking behavior if it was mediated by cigarettes rejection by parents and close friends. Thus, this posed different findings compared to this study. On the other hand, Verkooijen (2006) stated that the belief of the existence of rules on drugs abuse mediated by the identity of teen groups of narcotics. In fact, the pattern was almost similar to this research, which stated that peer attachment was the influencing mediator between the belief of outside rules for the risk of drugs abuse, but it was not proven in this study.

The influence of peer attachment was also found in previous research (Curran, *et al.,* 1997; Dolcini & Adler, 1994; Wills & Cleary, 1999), which stated that peers were the main risk factor for drugs use; however, the study by Eiser, *et al.* (dalam McLeod, White, Mullins & Davey, 2008) showed that adolescent could actively participate in choosing friends who were normatively accepted in the society. This was also included in the study that the number of close friends who were at risk for drugs abuse was more than those who were not.

The influencing factor on peers attachment, the belief of outside rules and the involvement of leisure time activities on the linkage pattern of social control model for risky adolescent could be built through schools' commitment. Schools as the social control institutions, as stated by Hirschi (1969, 2002), was hoped to be able to make friendships at school. Similar to Dixon's (2007) findings, schools' commitment would create peers attachment. However, Dewit, *et al.* (2000) stated that there was an impact on schools' commitment in making firm and consistent rules. Byrne, Nixon, Mayock, and Whyte (2006) also stated that schools' commitment in managing spare time activities also prevent the risk of drugs abuse.

Another influencing factor of adolescent behavior on drugs abuse was smoking behavior. The campaign for smoking behavior was promoted by American government on 2002 (*www.tobaccofreekids.org.*, 2002), which stated that adolescent who smoked had 11 times chance of being drugs user. This was also supported by Afandi, *et al.*'s (2009) findings that smoking habit was a risk factor for drugs abuse.

Related to smoking behavior, Astuti (2010) found that smoking behavior started at the age of eight. This age was at high risk for drugs abuse. Furthermore, 47.8% of the subjects were found as smoker. The findings by Purwandari & Lestari (2011) showed that there were 23.3% of senior high school adolescent and 20.5% of those in the village were smokers. If it was associated with the above influence, that was also the percentage of drugs abuse risk. The alcohol, tobacco and other psychoactive substance use situation among students could be related to psychosocial factors: the possibility to relax, to reduce stress, to experience pleasure, to overcome boredom and to communicate Merfeldaite, Indrasiene, Jegeleviciene, Railiene, & Zemaitaityte (2019).

Mediator, which had active role on the risk of drugs abuse, was the involvement of spare time activities, which was also the schools' commitment. Begue & Roche (2008); Kumar, O'Malley, Johnston, Schulenberg, & Bachman (2002) strengthened the social control theory stated by Hirschi, which stated that schools' nuance that was built through commitment would raise the students' attachment to the rules, actions as exemplified by the teachers and adults on school ground. The comfort of staying school (students had positive psychology orientation to stay at school) with the norms and rules made the students want to actively participate in school activities. If the condition was reached, the students' spare time would pass unconsciously and it was filled with beneficial activities related to school activities, either extracurricular or merely gathering to finish assignments.

Aside of school, family was also social control institution. Family differed from school. School as formal institutions was managed structurally and had written rules; whereas, family was informal institution and applied conventional law (unwritten rules with certain demanded to be done). Based on the differences, factor of the attachment between father-children and between mother-children became important for the social control function, however it was indirect, as stated in study done by Bahr *et al.* (2005); Dewit *et al.* (2000); Marcos *et al.* (1986). The attachment between father-children and between mother-children was based on the factors of belief, communication, and the involvement would become a strong control in anticipating the risky behavior of drugs abuse. Hence, indirect effects on the action were also needed to be considered.

Based on indirect effect on the social control model of adolescent's behavior of drugs abuse risk, the attachment between father-children and between mother-children on the risk of drugs abuse with the mediator of schools' commitment, the belief of outside rules, peers attachment, and the involvement of leisure time activities created different patterns. On father-children attachment on the risky behavior of drugs abuse, the role of mediator strengthened the attachment between both parties. The attachment between father-children was already built well needed schools' commitment, the belief of outside rules, peers attachment, and the involvement of leisure time activities. On the other hand, the attachment between mother-children had direct effect on children in the risk of drugs abuse.

Different findings in this study was the existence of external factors effect simultaneously (attachment between father-children, between mother-children, schools' commitment, peers attachment, the involvement of leisure time activities, and smoking behavior) on the risk of drugs abuse. On males, the external factors affected them, while it was not the case for females. This condition also showed that in collecting data, finding girls was far harder compared to boys. It was seen through the comparison of more numbers of males compared to females (79.3% and

20.7%). Hagan *et al.*(1979, Block, 1984, in Booth¸*et al* ., 2008) explained that the mechanism of social control usually focused on gender. For example, girls had better protection compared to boys; however, authoritically, boys had more authority compared to girls.

The data matched the study done by Thornberry *et al.* (2006, in Booth *et al*., 2008), which substantially explained that different gender, male and female, would affect the on risk factor of bad behaviors; one of them was drugs abuse. Purwandari, *et al.* (2011) used adolescent as the subject of the research for drugs abuse also showed that there were different type of bad behaviors between males and females. This would influence the implications of prevention program on the risky behavior of drugs abuse between male and female.

The superiority of this study was that the social control model had better understanding on adolescent who were at risk for drugs abuse in general due to the factors, in which its effects were not individual. However, individual factors should still be considered, especially to female adolescent subjects. Furthermore, the cross-sectional design of this research disabled the study to accurately determine the percentage numbers of risked subject who had the tendency of becoming drugs user. Thus, the longitudinal research design was needed for further research.

VI. CONCLUSION

The study could be concluded : the theoretical and empirical model that social control model on adolescent behavior risk on drug abuse could be explained through external factors such as attachment between father-children and mother-children, school's commitment, the belief of outside rules, peers' attachment, involvement of leisure time activities, and smoking habits; risky adolescent behaviors of drug abuse can be predicted from the involvement of leisure activity and smoking behavior; in adolescents are not at risk of drug abuse is a risk factor of smoking behavior, involvement of leisure time activities, and peers' attachment; and adolescent risk factors that exacerbate risk is the involvement of leisure activities; protection factors among adolescent risk and adolescents are not at risk of drug abuse of the same, such as attachment between father-children and mother-children, school's commitment, and different patterns of protection; risk of drug abuse on male subjects was heavily influenced by the aforementioned external factors. The results of this study will be useful for drug abuse intervention program. To realize this, a macro with certain policies on social ecology system should be established. Furthermore, Narcotic agency on district should cooperate with the education institution and other social organizations for teenagers to make a concrete effort in prevention acts.

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