

**THE INFLUENCE OF INDIVIDUAL, FAMILY, AND SOCIAL ENVIRONMENT  
FACTORS ON METHAMPHETAMINE ABUSE IN ACEH  
(Case Study of Methamphetamine Patients at BNNP Aceh)**

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**Abstract**

*This study aims to identify the types of individual, family, and social environmental factors influencing methamphetamine abuse in Aceh society. Additionally, it analyzes the effects of individual, family, and social environmental factors on methamphetamine abuse in Aceh society. The sampling technique used in this study employed a saturation or census sampling method. Census technique is a sampling method where all members of the population are used as samples due to the relatively small population size. Therefore, the sample size in this study was 36 individuals, all of whom were patients undergoing rehabilitation at the National Narcotics Agency (BNNP) Aceh. Data were collected using questionnaires. To test the influence of individual, family, and social environmental factors on methamphetamine abuse, a multiple nonlinear regression analysis model was applied. The results showed that the majority of individuals' factors were in the agree category (38.9%), family factors in the agree category (47.2%), and social environmental factors in the agree category (38.9%). The analysis results indicated a significant relationship (Sig=0.07) between the individual factor variables and methamphetamine abuse, a significant relationship (Sig=0.042) between the family factor variables and methamphetamine abuse, and a significant relationship (Sig=0.035) between the social environmental factor variables and methamphetamine abuse in Aceh society.*

**Keywords: Individual Factors, Family Factors, Social Environmental Factors, Methamphetamine Abuse**

**1. INTRODUCTION**

Indonesia is currently facing a narcotics emergency. This indicates that Indonesia's situation is increasingly unsafe regarding drug abuse cases, requiring attention and vigilance from various elements of society to prevent the spread of illicit drugs. The rapid spread of illicit drugs in Indonesia is partly due to advancements in information and transportation technologies. However, these technological developments also facilitate the entry of dangerous and prohibited substances into Indonesia, posing a challenge to law enforcement agencies (Telaumbanua, 2018).

Aceh Province, located in western Indonesia, holds special status and specificity for its residents. Internationally, Aceh is known as a very religious region, with a majority Muslim population that constitutes the highest percentage of Muslims in Indonesia, living according to Islamic Sharia principles. Aceh Province has stringent regulations regarding drug abuse, as stipulated in Aceh Qanun Number 8 of 2018 on Facilities for Narcotics Abuse Prevention, which comprehensively addresses issues from eradication and prevention to empowerment, rehabilitation, and post-rehabilitation. This Qanun has led to Aceh Governor's Regulation Number 35 of 2020 concerning the financing of medical rehabilitation for victims of narcotics, psychotropics, and other addictive substances at Aceh Mental Hospital. Several factors contribute to drug abuse, including individual, family, and social environmental factors. An individual can become addicted due to one or a combination of these factors (Hawari, 2009).

According to data from the Aceh National Narcotics Agency (BNNP) (2023), there are 41 individuals undergoing rehabilitation treatment for methamphetamine addiction, originating from various regions in Aceh. Patients treated at BNNP Aceh are those who voluntarily seek treatment

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or are brought by their families, and many drug users in society remain undetected. Based on this background, the researcher was interested in conducting research on "The Influence of Individual, Family, and Social Environmental Factors on Methamphetamine Abuse in Aceh (Case Study of Methamphetamine Patients at BNNP Aceh)". This study focuses on individual, family, and social environmental factors influencing methamphetamine abuse in Aceh.

**2. IMPLEMENTATION METHOD**

The population in this study consisted of 36 individuals who are methamphetamine patients undergoing rehabilitation at BNNP Aceh. The sampling technique employed in this study was saturation sampling or census sampling. Census technique involves selecting all members of the population as samples due to the relatively small population size. Therefore, the sample size used in this study was 36 individuals, all of whom were patients currently undergoing rehabilitation at BNNP Aceh. The method used by the researcher in this study was the questionnaire method, where questionnaires would be distributed to the 36 methamphetamine users currently undergoing rehabilitation at the Aceh Provincial BNN. The type of research employed in this study was qualitative research analyzed quantitatively using the multiple nonlinear regression analysis approach. The impact analysis results will be demonstrated through the multiple nonlinear regression analysis. This model aims to explore the relationship between variable X and variable Y, as follows:

$$\text{Log } y = \text{log } \alpha_0 + \alpha_1 \text{log } X_1 + \alpha_2 \text{log } X_2 + \alpha_3 \text{log } X_3 + e.$$

This research aims to identify the types of individual, family, and social environmental factors contributing to methamphetamine abuse in the community of Aceh, and to analyze the influence of these factors on methamphetamine abuse in Aceh.

**3. RESULTS AND DISCUSSION**

**Table 4.1**  
**Frequency Distribution of Individual Factors (n=36)**

No	Individual Factor	Frequency	Percentage
1	Strongly Agree	11	30,6
2	Agree	14	38,9
3	Neutral	11	30,6
4	Disagree	0	0
5	Strongly Disagree	0	0
Total		36	100

Source: Primary Data (processed) 2024

Table 4.1 above illustrates how respondents perceive the influence of individual factors on methamphetamine abuse. The majority, 14 respondents, agreed that individual factors influence methamphetamine abuse, followed by 11 respondents each for strongly agree and neutral.

**Table 4.2 Frequency Distribution of Family Factors (n=36)**

No.	Family Factor	Frequency	Percentage
1	Strongly Agree	9	25
2	Agree	17	47,2
3	Neutral	10	27,8
4	Disagree	0	0
5	Strongly Disagree	0	0
Total		36	100

Source: Primary Data (processed) 2024

Table 4.2 describes how respondents perceive the influence of family factors on methamphetamine abuse. The majority, 17 respondents, agreed that family factors influence methamphetamine abuse, followed by 10 respondents for neutral and 9 respondents for strongly agree.

**Table 4.3**  
**Frequency Distribution of Social Environmental Factors (n=36)**

No.	Social Environmental Factor	Frequency	Percentage
1	Strongly Agree	8	22,2
2	Agree	14	38,9
3	Neutral	13	36,1
4	Disagree	1	2,8
5	Strongly Disagree	0	0
Total		36	100

Source: Primary Data (processed) 2024

Table 4.3 explains how respondents perceive the influence of social environmental factors on methamphetamine abuse. The majority, 14 respondents, agreed that social environmental factors influence methamphetamine abuse, followed by 13 respondents for neutral, 8 respondents for strongly agree, and 1 respondent for disagree.

**Table 4.4**  
**Analysis Results of Individual Factors, Family Factors, and Social Environmental Factors on Methamphetamine Abuse**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	.409	.197		
Category of Individual Factors	.266	.092	.394	2.904	.007
Category of Family Factors	.260	.122	.291	2.121	.042
Category of Social Environmental Factors	.207	.094	.291	2.206	.035

a. Dependent Variable: Category of Methamphetamine Abuse

Source: Primary Data (processed) 2024

$$Y = 0,409 + 0,266 \text{ Log } X_1 + 0,260 \text{ Log } X_2 + 0,207 \text{ Log } X_3$$

From the regression results above, it can be interpreted as follows:

1. The constant (Y) of 0.409 indicates that when the independent variables are considered constant, methamphetamine abuse increases by 0.409.
2. The coefficient for individual factors (X1) of 0.266 is positive, meaning an increase in individual factors increases methamphetamine abuse by 0.266, assuming other factor variables remain constant.
3. The coefficient for family factors (X2) of 0.260 is positive, meaning an increase in family factors increases methamphetamine abuse by 0.260, assuming other factor variables remain constant.
4. The coefficient for social environmental factors (X3) of 0.207 is positive, meaning an increase in social environmental factors increases methamphetamine abuse by 0.207, assuming other factor variables remain constant.

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**1. Partial Testing Results (t-test)**

**Individual Factor Variable**

The individual factor has an influence on methamphetamine abuse among patients in BNNP Aceh. This can be seen from the regression results above where the regression coefficient t-value is  $2.904 \geq t\text{-table } 2.036$  or from the significance value below 0.05, indicating that the individual factor significantly influences methamphetamine abuse. Respondents' answers show that the majority, 14 respondents, agreed that individual factors significantly affect methamphetamine abuse. They believe that self-control directs their decision to use or not use methamphetamine. Individual factors are crucial in making decisions about actions, and they perceive both the good and bad consequences.

**Variable Family Factors**

The family variable influences drug abuse among patients of BNNP Aceh. This can be observed in the regression results above, where the regression coefficient value of t-test  $2.121 \geq t\text{-table } 2.036$  or can also be seen from the significance value below 0.05, which can be interpreted as the family factor variable influencing drug abuse. Looking at the responses regarding the family factor variable, the majority of respondents, 17 in total, agree that family factors significantly affect drug abuse. This agreement is based on the assumption that the family serves as the initial foundation for the formation of a person's good or bad personality. A harmonious family relationship between parents and children, or between spouses, tends to promote positive outcomes. There were 10 respondents who maintained a neutral stance, viewing drug abuse as unrelated to whether a family is harmonious or not, as drugs can infiltrate and affect people from any societal background.

**Variable Social Environment Factors**

The family variable also influences drug abuse among patients of BNNP Aceh. This is evident from the regression results above, where the regression coefficient value of t-test  $2.206 \geq t\text{-table } 2.036$  or can also be seen from the significance value below 0.05, indicating that the social environment factor variable significantly influences drug abuse. Looking at the responses regarding the social environment factor variable, the majority of respondents, totaling 14, agree that social environment factors significantly affect drug abuse.

**2. Simultaneous Test (F Test)**

**Table 4.5**  
**ANOVA for Methamphetamine Abuse**

		ANOVA <sup>a</sup>				
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.106	3	.035	9.922	.000 <sup>b</sup>
	Residual	.114	32	.004		
	Total	.219	35			

a. Dependent Variable: Methamphetamine Abuse Category

b. Predictors: (Constant), Social Environment Factor Category, Individual Factor Category, Family Factor Category

Source: Primary Data, processed (2024).

From the results, the calculated  $F_{\text{value}}$  is 9.922 with a significance probability of  $\text{sig} = 0.000$ . The calculated  $F_{\text{value}}$  of  $9.922 > F_{\text{table}} 3.294$  and the significance value is smaller than 0.05 or  $0.000 < 0.05$ , indicating that the independent variables collectively have a significant effect on the dependent variable.

### 3. Coefficient of Determination

The coefficient of determination ( $R^2$ ) explains the extent of the relationship between one variable and another. The relationship between independent variables (X) and the dependent variable (Y) can be seen in the following table:

**Table 4.6**  
**Correlation and Determination Coefficient Analysis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.694 <sup>a</sup>	.482	.433	.05958

a. Predictors: (Constant), Social Environment Factor Category, Individual Factor Category, Family Factor Category

Source: Primary Data, processed (2024)

The correlation analysis of individual, family, and social environment factors with methamphetamine abuse yielded an Adjusted R Square of 0.433, indicating that individual factors (X1), family factors (X2), and social environment factors (X3) collectively account for 43.3% of the variation in methamphetamine abuse (Y), while the remaining 56.7% is influenced by other variables not examined in this study.

### 4. CONCLUSION

Based on the research results, it can be concluded that:

- 1) Individual factors influence methamphetamine abuse with a regression coefficient of 0.007, with the majority (14 respondents) agreeing, followed by 11 respondents who were neutral or strongly agreed. This finding aligns with Putrid and Irenna's (2018) study showing that extroverted personalities have a 2.44 times greater risk of drug abuse compared to introverted adolescents. The researchers noted that adolescents use drugs out of curiosity, to follow trends, avoid boredom, cope with life difficulties, and rebel against parental rules.
- 2) Family factors influence methamphetamine abuse with a regression coefficient of 0.042, with the majority (17 respondents) agreeing, followed by 10 neutral and 9 strongly agreeing respondents. This finding is consistent with Sartika and Iskandar's (2023) study on the influence of family relationships and social environment on preventing drug abuse among adolescents in the Kuta Baro district of Aceh Besar, which found that 54.4% of respondents had dysfunctional families, 52.9% experienced negative social environments, and 51.5% had negative drug abuse prevention measures.
- 3) Social environment factors influence methamphetamine abuse with a regression coefficient of 0.035, with the majority (14 respondents) agreeing, followed by 13 neutral, 8 strongly agreeing, and 1 disagreeing respondent. This finding is consistent with Nurul Fitri's (2014) study on factors related to drug abuse in Makassar City, which found that 53.3% of respondents had a positive social environment and 83.3% had a negative social environment. The chi-square statistical test showed a relationship between the social environment and drug abuse in Makassar City, with a p-value of  $0.037 < \alpha = 0.05$ .

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