

# Comparative Analysis of Psychological Variables among Conviction Offense



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## Abstract

This study investigates the differences in psychological variables among murders, property crimes, and drug offenders. For the analysis, 90 inmates were collected and examined about their psychological factors. All subjects were assessed in terms of antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation. This study found that [1] aggression and suicidal ideation are statistically significantly different between murders and property crime offenders [2] murders, property crime, and drug offenders are significantly different in hopefulness. Lastly, it was observed that antisocial thinking was a significant risk factor to explain recidivism.

**Keywords:** Criminal offense; Psychological variables; Comparative analysis; Property crimes; Drug offenders; Murders

## Introduction

Psychological variables related attitude and emotion have been explored as a factor predicting criminality and recidivism [1]. Several researches proposed that persons with serious mental illness have higher rates of violent behaviors [2]. For examples, schizophrenia and psychosis has been found to be related to violence and criminals [3]. Meanwhile, mild symptoms of mental illness related to psychological factors such as delusions and hallucinations are also associated with violent and criminal acts [4]. More recently, research attention has focused on psychological factors related to attitude and emotion among inmates with different criminal offense [1]. Antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation can be different profiles among criminal offenses such as murders, property crimes, and drug offenders reported the antisocial attitudes and criminogenic thinking styles among inmates. Specially, the elevated levels of aggression, hopelessness, emotional deprivation, abandonment, mistrust, and social isolation are associated with higher levels of criminal attitudes and recidivism [5,6]. Beyond the psychological variables, demographic variables such as educational level, gender, race, age are associated with the criminal thinking, but research has proposed inconsistent results [7,8]. Substance abuse also has been identified as a risk variable for criminal behaviors [9,10]. In addition, co-occurring substance

abuse with mental illness has been found to a significant risk factor that explains violent and criminal behavior [11]. Although many researches have been conducted to explain the risk factors that associated with criminal thinking and crime offense. Much remains unknown about psychological differences including attitudinal and emotional variables in terms of different criminal offenses. Hence, the purpose of this study is to explore the comparative research on differences among murders, property crimes, and drug offenders in emotional and psychological variables. Furthermore, we hypothesize that these psychological variables can explain the number of recidivisms. Therefore, we investigated whether antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation, measured by psychometrical instruments, among inmates with different offense. Also, we explored that how antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation are associated with recidivism. Our research questions are as follows:

- a) Are there differences in antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation in terms of murders, property crimes, and drug offenders?
- b) How antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation are associated with recidivism?

Methods

Subjects

A real data study was conducted using data collected from Busan National Prison. Thirty murders intimate, thirty intimates by property crimes, and thirty drug offenders were randomly collected and examined their psychological factors. Antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation were assessed. In addition, age, educational level, religion, number of crimes were also collected as a background information.

Statistics

Data were analyzed by Variance of Analysis (ANOVA) for examining the difference in antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation in terms of murders, property crimes, and drug offenders. After that, Bonferroni comparison was tested as a post-hoc test. Regression analysis was also conducted in order to investigate which variables (antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation) significantly related to the number of crimes (recidivism). All analyses were conducted by using SPSS 20.0.

Results and Discussion

Table 1 shows the descriptive statistics of samples in this study. The average age was 44.2 and the average of crimes numbers were 3.68. The educational level was also reported

and 16.8% of them were under elementary school, 5.5% of them was under middle school, 60% of them was high school, and 17.7 % was over university. All psychological variables were normally distributed by skewness and kurtosis. After descriptive statistics were conducted, this study examined the differences in psychological variables among murders, property crimes, and drug offenders using Analysis of Variance (ANOVA). Table 2 shows the results of ANOVA. The results show that aggression, hopelessness, and suicide ideation were statistically significantly different among subjects. Post-hoc analysis using Bonferroni method was conducted in aggression and hopelessness among murders, property crimes, and drug offenders. Table 3 shows that murders and intimates of property crimes were significantly different in aggression. Also, murders and drug offenders / Murders and property crimes were significantly different in hopelessness. Lastly, murders and property crimes were different in suicide ideation Figure 1. Next, regression analysis was conducted in order to investigate which variables (antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation) significantly related to the number of recidivisms. The dependent variable was recidivism and independent variables were the scores of antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation. Table 4 shows the results of the regression analysis. It was observed that antisocial thinking was a significant associated with recidivism. Other variables were not significantly related to "recidivism".

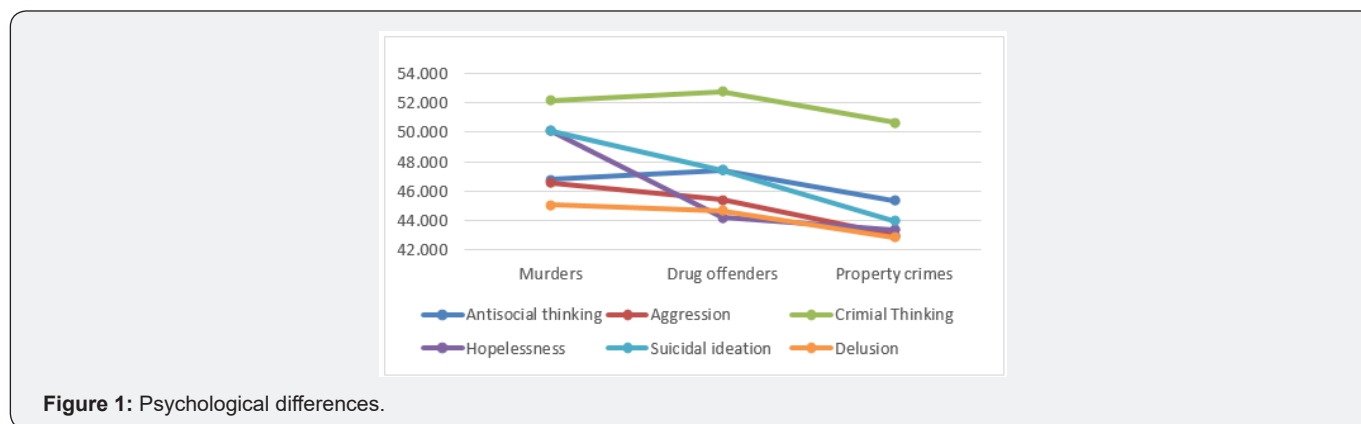


Figure 1: Psychological differences.

Table 1: Descriptive statistics.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	90	41	64	44.22	4.282
# of recidivism	90	1	20	3.68	3.678
Antisocial Thinking	90	39	57	46.49	4.715
Aggression	90	37	64	44.99	5.782
Criminal Thinking	90	43	79	51.84	5.603
Hopelessness	90	39	79	45.91	7.345
Suicidal ideation	90	42	81	47.16	8.19
Delusion	90	41	64	44.22	4.282

Table 2: ANOVA in psychological variables.

Variable	Sum of Squares		df	Mean Square	F	P
	Contrast	Error				
Antisocial Thinking	Contrast	65.489	2	32.744	1.489	0.231
	Error	1913	87	21.989		
Aggression	Contrast	198.422	2	99.211	3.109	0.05
	Error	2776.567	87	31.915		
Criminal Thinking	Contrast	70.822	2	35.411	1.131	0.327
	Error	2723	87	31.299		
Hopelessness	Contrast	800.022	2	400.011	8.697	0
	Error	4001.267	87	45.992		
Suicidal ideation	Contrast	561.622	2	280.811	4.517	0.014
	Error	5408.2	87	62.163		
Delusion	Contrast	80.689	2	40.344	2.263	0.11
	Error	1550.867	87	17.826		

Table 3: Pairwise comparison in psychological variables.

		Mean Difference	Std. Error	p Lower Bound	95% Confidence Interval for Difference <sup>b</sup>	
					Upper Bound	
Aggression						
Murders	Drug offenders	1.167	1.459	1	-2.394	4.727
	property crimes	3.567*	1.459	0.049	0.006	7.127
Drug offenders	property crimes	2.4	1.459	0.311	-1.161	5.961
Hopelessness						
Murders	Drug offenders	5.867*	1.751	0.004	1.592	10.141
	property crimes	6.700*	1.751	0.001	2.425	10.975
Drug offenders	property crimes	0.833	1.751	1	-3.441	5.108
Suicide Ideation						
Murders	Drug offenders	2.633	2.036	0.598	-2.336	7.603
	property crimes	6.100*	2.036	0.011	1.13	11.07
Drug offenders	property crimes	3.467	2.036	0.276	-1.503	8.436

Based on estimated marginal means

\*: The mean difference is significant at the .05 level.

B: Adjustment for multiple comparisons: Bonferroni.

Table 4: Relationship between recidivism and psychological variables.

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
(Constant)	-4.857	4.84		-1.004	0.318
anti	0.267	0.096	0.342	2.775	0.007
agress	-0.048	0.104	-0.076	-0.464	0.644
crime	-0.133	0.087	-0.202	-1.532	0.129
hopeless	-0.016	0.084	-0.031	-0.188	0.852
suicide	0.004	0.079	0.009	0.051	0.959
de	0.129	0.13	0.151	0.995	0.323

**Table 5:** Model summary of the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.343a	0.118	0.054	3.577

### Conclusion

This study investigates the differences in psychological variables among murders, property crimes, and drug offenders. The scores of antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation in 90 inmates were collected and examined. First, we conducted the analysis of the mean difference in antisocial thinking, aggression, hopefulness, delusion, and suicidal ideation among three groups. Results show that murders and intimates of property crimes were different in aggression. Also, murders and drug offenders were different in hopelessness. Murders and property crimes were significantly different in hopelessness as well. Lastly, murders and property crimes were different in suicide ideation. In terms of recidivism, antisocial thinking among aggression, hopefulness, delusion, and suicidal ideation was a significant psychological variable to explain recidivism. This study implies that psychological variable can be different among various crimes. It may be helpful to develop and implement interventions in terms of different crime offense considering different psychological factors.

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### References

1. Wolff R, Morgan R, Shi J (2013) Comparative analysis of attitudes and emotions among inmates, Does mental illness matter? *Criminal Justice and Behavior* 40(10): 1092-1108.

2. Monahan J, Steadman HJ (1996) *Violence and mental disorder: Developments in risk assessment*. Chicago, IL: University of Chicago Press, USA.

3. Douglas KS, Guy LS, Hart SD (2009) Psychosis as a risk factor for violence to others: A meta-analysis. *Psychol Bull* 135(5): 679-706.

4. Peterson JK, Skeem JL, Hart E, Vidal S, Keith F (2010) Analyzing offense patterns as a function of mental illness to test the criminalization hypothesis. *Psychiatr Serv* 61(12): 1217-1222.

5. Morgan RD, Fisher WH, Duan N, Mandracchia JT, Murray D (2010) Prevalence of criminal thinking among state prison inmates with serious mental illness. *Law Hum Behav* 34(4): 324-336.

6. Wolff N, Morgan R, Shi J, Fisher W, Huening J (2011) Thinking styles and emotional states of male and female prison inmates by mental disorder status. *Psychiatric Services* 62(12): 1485-1493.

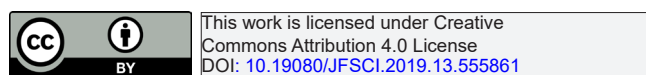
7. Walters GD, Frederick AA, Schlauch C (2007) Postdicting arrests for proactive and reactive aggression with the PICTS Proactive and Reactive composite scales. *Journal of Interpersonal Violence* 22: 1415-1430.

8. Mandracchia JT, Morgan RD (2012) Predicting offenders' criminogenic cognitions with status variables. *Criminal Justice and Behavior* 39: 5-25.

9. Chandler RK, Fletcher BW, Volkow ND (2009) Treating drug abuse and addiction in the criminal justice system *JAMA* 301(2): 183-190.

10. James DJ, Glaze LE (2006) *Mental health problems of prison and jail inmates* (Bureau of Justice Statistics Special Report No. NCJ 213600). Department of Justice, Washington, US.

11. Steadman JJ, Mulvey E, Monahan J, Robbins P, Applebaum P, et al. (1998) Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Arch Gen Psychiatry* 55(5): 393-401.



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