

The Effects of Alcohol-related Factors on Violent Crime 알코올과 관련된 요인 **이 폭력 범죄에 끼치는 영향**

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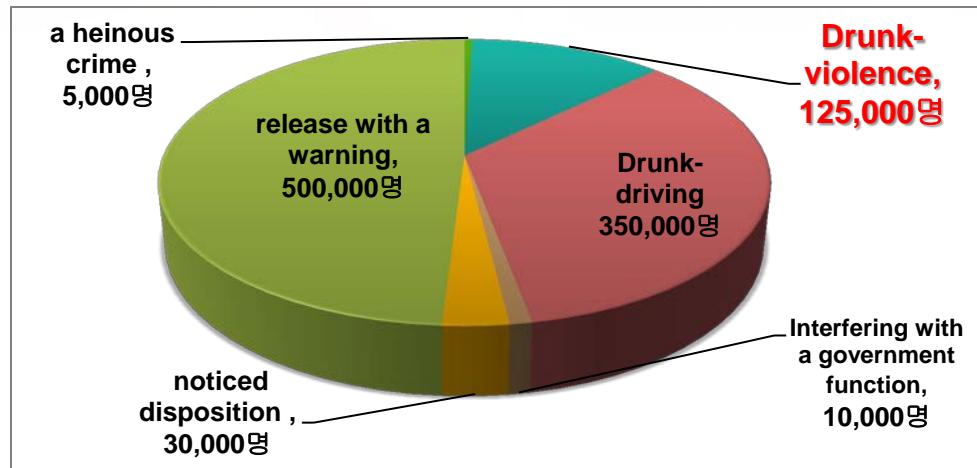
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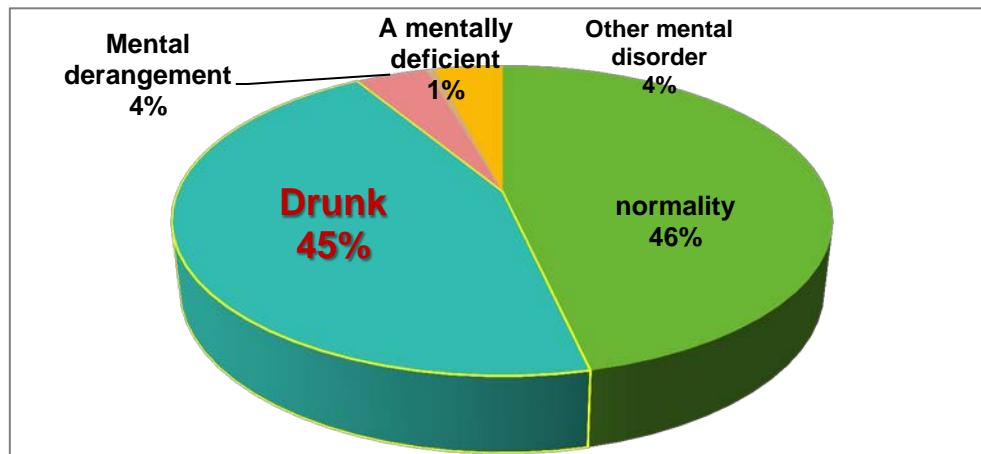
Recommend 권고사항

Introduction

The realities of Alcohol-related crime Type



: Drunk-Violence occurs most frequently, except for Noticed disposition, Drunk-driving.

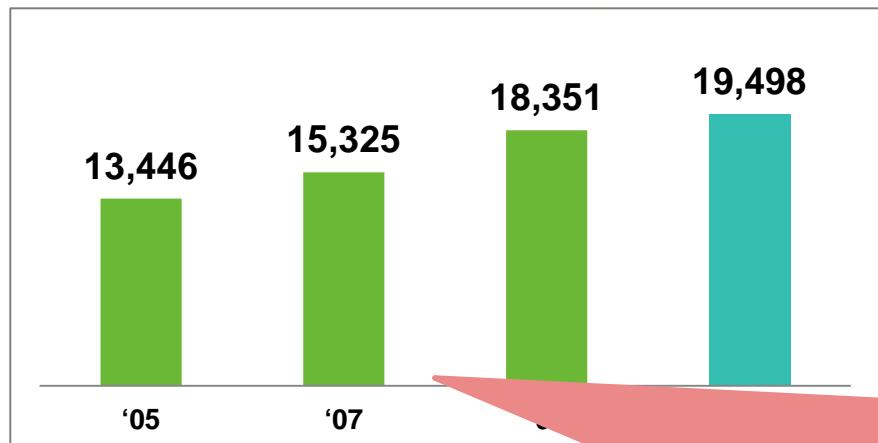


: At the time Homicide Crime, 44.9% of the offenders are in a Drunk state.

- Source : National Police Agency. "Crime Statistics", 2012.

Introduction

The Seriousness of the Drunk-offense



- Source : National Police Agency. "Crime Statistics", 2011.

- Drunk-Violent crime such as Drunk-Attack occurred every 451 cases in the country.

- Source : ChosunMedia. 2010.6.1.

Increase in Serious Crimes

alcohol-related
murder cases

It's a social issue

"Recent Social Issues"

Oh Won Chun murder case,
Kim Gil Tae murder case,
Jo Doo Soon child sex crime case

Drunk-Crime

13.2 cases



Introduction

Previous research

- The relationship between **Partner Violence** and **drinking factors**.
 - * drinking factor : Drinking Behavior, level of Problem drinking etc.
(Jang, 2008; Jo-Yoon, 2012; Hyeon, 2010; Foran and O'Leary, 2008)
- Drinking in Adolescence causes of potential problems, such as violence and crime of Adulthood.(Jung, 2003 Re-quote)
- Internal problem and externalizing behavior of Children was affected by Drinking problem of Parents and family.
(Hill et al., 2008; Mylant et al., 2002).



Methods

Participants

- The study used the data '2011 Activation plan of treatment for the prevention and reduction of alcohol abuses' conducted by the Ministry of Health and Welfare.
- A sample is used to a stratified sampling method in proportion to the size of the prisoners by City and Province. So it chose 2 out of 11 detention houses, 18 out of 36 penitentiaries, 11 out of 56 probation offices.
- This study used a structured questionnaire. There were **a total of 2,485 participants** for the analysis or insincere response, at the time of analysis between variable an extreme figures through removal etc.



Methods

Hypothesis

[Research Question 1] To investigate the differences in the type of crime, recidivism status, and whether the prisoner is a problem drinker or not according to the demographic and economic characteristics

[Research Question 2] To investigate the differences in the level of problem drinking according to the main variables such as recidivism status, starting age of drinking alcohol, whether parents have a drinking problem and whether the criminal was drunk at the time of the crime.

[Research Question 3] To investigate the effect of drinking factors on violent crimes.

< hypotheses 1> Younger the starting age of drinking alcohol, the more positive influence on violent crime.

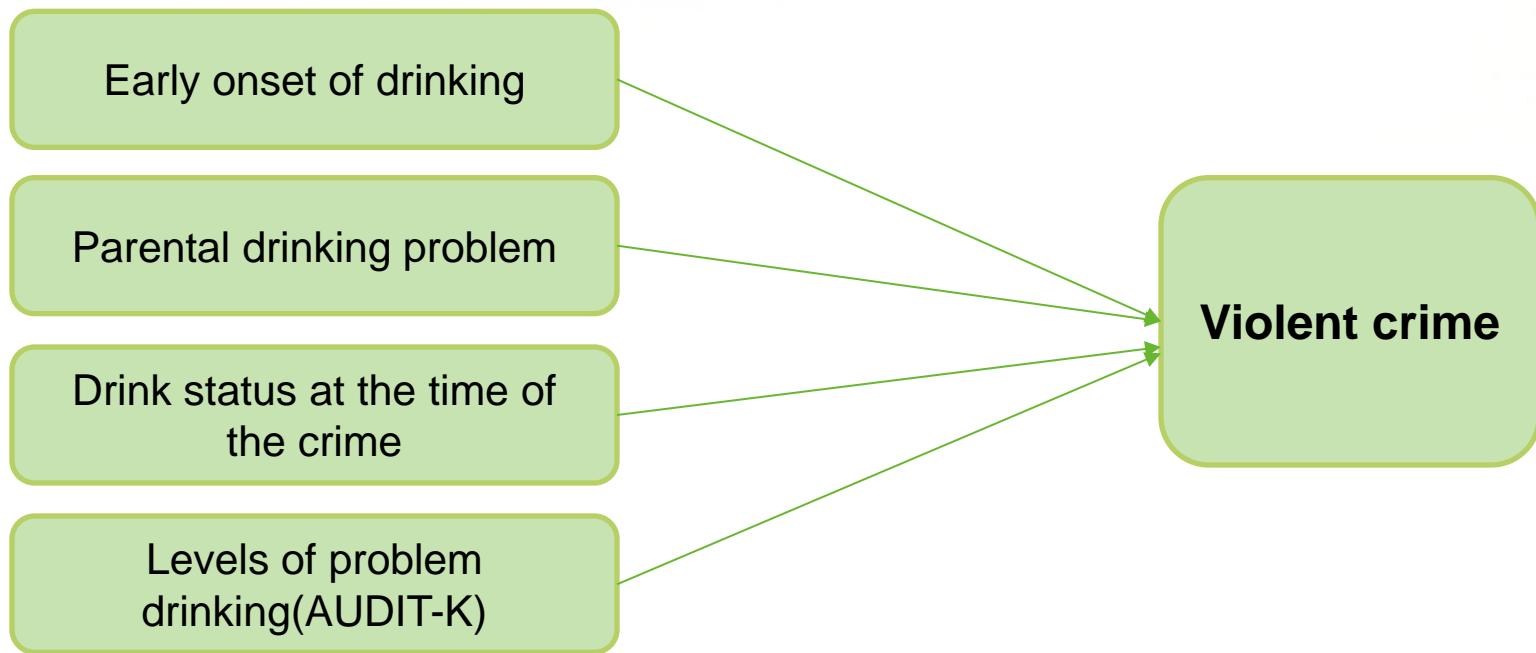
< hypotheses 2> The parents' drinking problem will have, the more positive influence on violent crime.

< hypotheses 3> Drinking at the time of crime will have, the more positive influence on violent crime.

< hypotheses 4> High levels of problem drinking will have, the more positive influence on violent crime.

Methods

Model



* Control Variables :

- **Demographic Characteristics** : sex, age, Marital status, Employment Status, Monthly income
- **Crime Characteristics** : Criminal Personality(Lifestyle Criminality Screening Form; LCSF)
: Recidivism status



Methods

Measures

Independent Variable - Drinking related factors

1. Early onset of drinking : the starting age of drinking alcohol
2. Parents drinking problem : Whether parents have a drinking problem,
3. Drink status at the time of the crime : Whether the criminal who committed a crime was drunk at the time of the crime
4. Problem drinking : Level of problem drinking(Audit-Korea ver.)

Control Variable

- Demographic Characteristics

: sex, age, Marital status, Employment Status, Monthly income

- Crime Characteristics

1. Criminal Personality(Lifestyle Criminality Screening Form) : Antisociality
2. Recidivism status : a first offender or Recidivism



Methods

Measures

A dependent Variable –Violent crimes

- Violent crime : murder, a robber, a sex offense, arson, violence
- The other crime : stealing, drunk driving, housebreaking, trickery/usurpation, a narcotic, Interfering with a government function, the others.

Analysis

A analysis method was conducted through

Descriptive statistics, Cross-tabulation analysis, T-test,

Hierarchical logistic regression

Using SPSS(SPAW) 18.0.

Results

Descriptive statistics

		frequency(N)	%	Total
Sex	male	2,372	95.5	2,485 (100.0)
	female	113	4.5	
age	≤ 20	443	17.8	2,485 (100.0)
	21-30	708	28.5	
	31-40	758	30.5	
	41-50	473	19.0	
	51 ≤	103	4.1	
Marital status	Unmarried	1,512	60.8	2,485 (100.0)
	Married	973	39.2	
Education level	Primary School or below	372	15.0	2,485 (100.0)
	Junior high school	494	19.9	
	Senior high school	1,140	45.9	
	College of above	479	19.3	
Employment Status	Unemployed	1,597	64.3	2,485 (100.0)
	Employed	888	35.7	
monthly income	Less than 1mililon (won)	297	12.0	2,485 (100.0)
	Less than 1million-2million	789	31.8	
	Less than 2million-3million	695	28.0	
	Above 3million (won)	704	28.3	

Cross-tabulation analysis

- Demographic Characteristics & the type of crime.

		Crime type(N=2372)		Total	χ^2
		Non-Violent Crime			
Sex	male	1,116 (47.0)	1,256 (53.0)	2,372	.272
	female	56 (49.6)	57 (50.4)	113	
age	≤ 20	203 (45.8)	240 (54.2)	443	5.083
	21-30	317 (44.8)	391 (55.2)	708	
	31-40	371 (48.9)	387 (51.1)	758	
	41-50	225 (47.6)	248 (52.4)	473	
	51 ≤	56 (54.4)	47 (45.6)	103	
Marital status	Unmarried	630 (41.7)	882 (58.3)	1,512	46.813***
	Married	542 (55.7)	431 (44.3)	973	
Education level	Primary School or below	129 (34.7)	243 (65.3)	372	56.889***
	Junior high school	207 (41.9)	287 (58.1)	494	
	Senior high school	553 (48.5)	587 (51.5)	1,140	
	College of above	283 (59.1)	196 (40.9)	479	
Employment Status	Unemployed	783 (49.0)	814 (51.0)	1,597	6.248*
	Employed	389 (43.8)	499 (56.2)	888	
monthly income	Less than 1mililon (won)	122 (41.1)	175 (58.9)	297	29.700***
	Less than 1million-2million	348 (44.1)	441 (55.9)	789	
	Less than 2million-3million	310 (44.6)	385 (55.4)	695	
	Above 3million (won)	392 (55.7)	312 (44.3)	704	
		1,172 (47.2)	1,313 (52.8)	2,485	

*p<.05, **p<.01, ***p<.001

Cross-tabulation analysis

- Demographic Characteristics & recidivism status

		Recidivism status(N=2372)		Total	χ^2
		a first offender	Recidivism		
Sex	male	1,038 (43.8)	1,334 (56.1)	2,372	4.569*
	female	61 (54.0)	52 (46.0)	113	
age	≤ 20	228 (51.5)	215 (48.5)	443	15.126**
	21-30	283 (40.0)	425 (60.0)	708	
	31-40	337 (44.5)	421 (55.5)	758	
	41-50	209 (44.2)	264 (55.8)	473	
	51 ≤	42 (40.8)	61 (59.2)	103	
Marital status	Unmarried	640 (42.3)	872 (57.7)	1,512	5.636*
	Married	459 (47.2)	514 (52.8)	973	
Education level	Primary School or below	141 (37.9)	231 (62.1)	372	47.012***
	Junior high school	193 (39.1)	301 (60.9)	494	
	Senior high school	489 (42.9)	651 (57.1)	1,140	
	College or above	276 (57.6)	203 (42.4)	479	
Employment Status	Unemployed	730 (45.7)	867 (54.3)	1,597	3.997*
	Employed	369 (41.6)	519 (58.4)	888	
monthly income	Less than 1milion (won)	124 (41.1)	175 (58.9)	297	17.380**
	Less than 1million-2million	313 (39.7)	476 (60.3)	789	
	Less than 2million-3million	309 (44.5)	386 (55.5)	695	
	Above 3million (won)	353 (50.1)	351 (49.9)	704	
Total		1,099 (44.2)	1,386 (55.8)	2,485	

*p<.05, **p<.01, ***p<.001

Cross-tabulation analysis - demographic and economic characteristics & problem drinker

		a problem drinker or not (N=2372)		Total	χ^2
		Problem drinker	Nomal drinker		
Sex	male	1,145 (48.3)	1,227 (51.7)	2,372	29.599***
	female	25 (22.1)	88 (77.9)	113	
age	≤ 20	203 (45.8)	240 (54.2)	443	8.158
	21-30	355 (50.1)	353 (49.9)	708	
	31-40	354 (46.7)	404 (53.3)	758	
	41-50	221 (46.7)	252 (53.3)	473	
	51 ≤	37 (35.9)	66 (64.1)	103	
Marital status	Unmarried	745 (49.3)	767 (50.7)	1,512	7.433**
	Married	425 (43.7)	548 (56.3)	973	
Education level	Primary School or below	197 (53.0)	175 (47.0)	372	37.432***
	Junior high school	273 (55.3)	221 (44.7)	494	
	Senior high school	521 (45.7)	619 (54.3)	1,140	
	College of above	179(37.4)	300 (62.6)	479	
Employment Status	Unemployed	733 (45.9)	864 (54.1)	1,597	2.514
	Employed	437 (49.2)	451 (50.8)	888	
monthly income	Less than 1mililon (won)	145 (48.8)	152 (51.2)	297	11.620**
	Less than 1million-2million	395 (50.1)	394 (49.9)	789	
	Less than 2million-3million	336 (48.3)	359 (51.7)	695	
	Above 3million (won)	294 (41.8)	410 (58.2)	704	
Total		1,170 (47.1)	1,315 (55.8)	2,485	

*p<.05, **p<.01, ***p<.001

Results

T-test

		N	M	SD	df	T-value
Recidivism status	a first offender	1,099	11.4795	7.86986	2483	-2.358*
	Recidivism offender	1,386	12.2388	8.05262		
Parental drinking problem	Yes	723	14.6335	8.23528	1251.506	-10.825***
	No	1,762	10.7826	7.59568		
Early onset of drinking	< 20years	1,529	13.2963	7.93795	2107.005	-11.421***
	> 21years	956	9.6747	7.53156		
Drink status at the time of the crime	Drunk	1,118	15.8086	7.99278	2117.367	-24.066***
	Non-Drunk	1,367	8.7089	6.39180		

*p<.05, **p<.01, ***p<.001

Results

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. 범죄유형	1												
2. 성별	.010	1											
3. 나이	-.022	-.023	1										
4. 배우자유무	.137**	.023	-.369**	1									
5. 직업유무	-.050*	.023	.056**	-.118**	1								
6. 월평균 소득	-.097**	-.009	.135**	-.240**	.362**	1							
7. 최종학력	-.150**	-.054**	-.047**	-.112**	.304**	.386**	1						
8. 범죄적 성격	.092**	.053**	-.056**	.020	-.076**	-.074**	-.152**	1					
9. 재범여부	.073**	.043*	.028	.048*	-.040*	-.075**	-.117**	-.007	1				
10. 음주시작연령	.100**	.161**	-.348**	.210**	-.087**	-.083**	-.105**	.152**	.025	1			
11. 부모음주문제여부	.094**	.059**	-.008	.049*	-.108**	-.149**	-.196**	.130**	.067**	.157**	1		
12. 범행당시 음주여부	.132**	.104**	-.013	.097**	.014	-.133**	-.134**	.188**	.061**	.073**	.140**	1	
13. 문제음주수준	.157**	.131**	-.040*	.085**	-.059**	-.078**	-.115**	.181**	.047*	.221**	.219**	.443**	1

*p<0.5, **p<.01, ***p<.001

Results

Hosmer and Lemeshow's Goodness-of-Fit Test

Step	X ²	df	P-value
1	3.978	8	.859
2	7.603	8	.473

As a result : the significance probability of the goodness of fit test in the 1st and 2nd stage was 0.05 thereby providing a basis to prove that the independent variables could be used to predict types of crime and to judge that the regression model was appropriate.

Results

Hierarchical logistic regression

			Model I		Model II		
			Coefficient	odds ratio	Coefficient	odds ratio	
Control Variable	Demographic -economical Factor	Sex(0: female)	-.050	.952	-.283	.754	
		Age	.005	1.005	.007	1.007	
		Marital status (0: Merried)	.535	1.707***	.485	1.625***	
		Employment Status (0: Employment)	.059	1.061	.055	1.056	
		Average monthly income	-.044	.957	-.031	.970	
		education	-.252	.777***	-.216	.806***	
Independent Variable	Criminal characteristic factor	Anti-social personality	.072	1.074***	.042	1.043*	
		Recidivism status (0: a first offender)	.220	1.245**	.194	1.214*	
Independent Variable	Alcohol-related factor	Early onset of drinking (0: >21 years)			.204	1.227*	
		Parental drinking problem (0 : No)			.130	1.138	
		Drink status at the time of the crime (0 : non-drinking)			.210	1.234*	
		Problem drinking level			.025	1.025***	
Model X ²				103.536***		168.090***	
-2log L				3319.222		3268.847	
df				8		12	

*p<0.5, **p<.01, ***p<.001

0 : a standard



Discussion

Alcohol education program and treatment system of Adolescent

**Professional psychosocial assessment process and treatment
programs for the diagnosis and evaluation of an offender**

**Specific custody facilities for treatment of Problem drinking and
rehabilitation programs of offender**

Establishing drunker-stability room in the community



Thank u.

