

GAPC

Association between Drinking Patterns and Work Performance of Industrial Workers

By

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Introduction

- A relatively low prevalence of alcohol consumption among workers was reported (2010).
- Limited number of researches describe how drinking could impair work performance.

Objective

- Explore a current prevalence of alcohol consumption among industrial workers
- Examine whether workers with different drinking patterns have different work performances.

Method

- A cross-sectional survey using a structured questionnaire

Data analysis

- SPSS (descriptive and F-test)

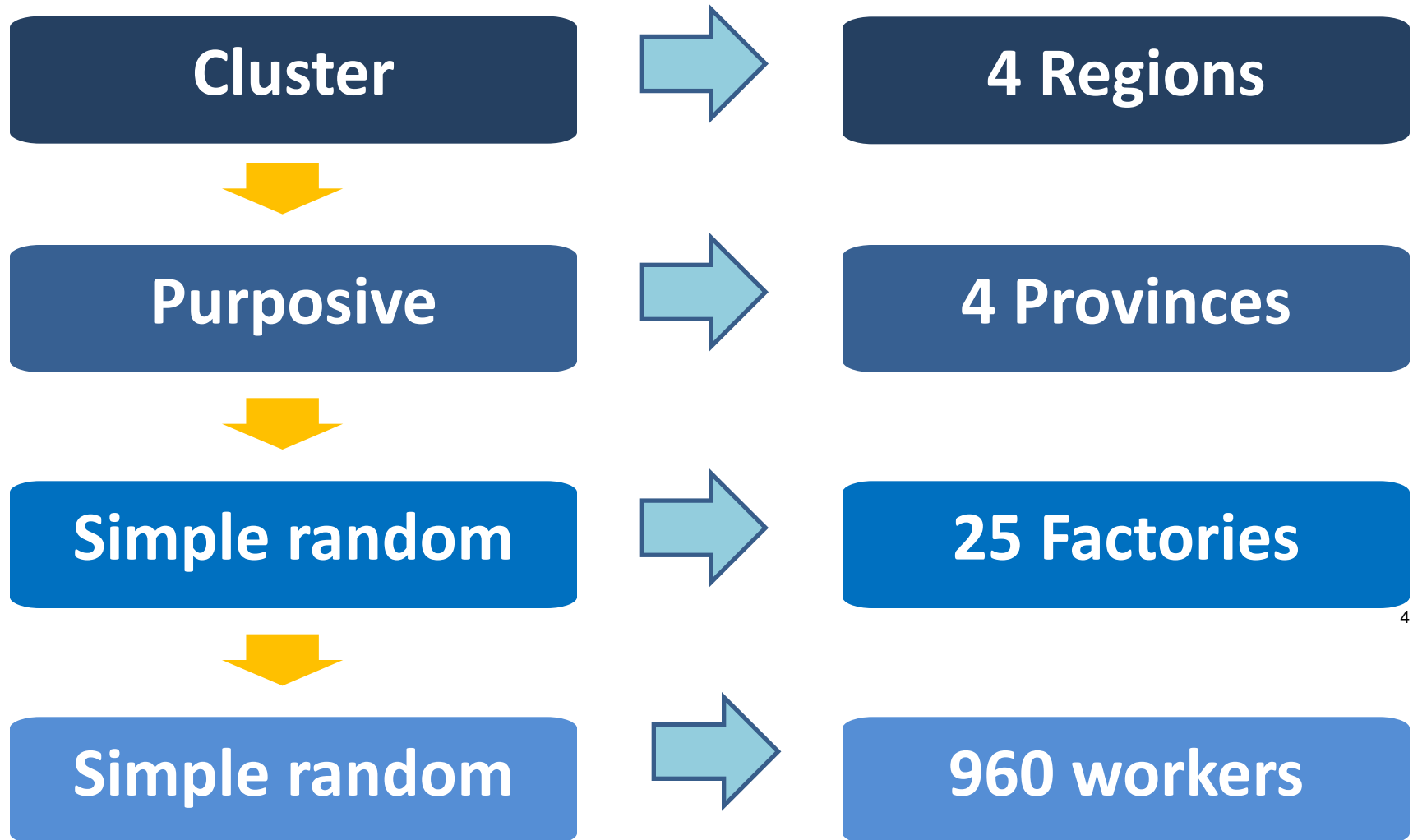
Sample

Operational workers in rubber and plastic factories in 4 provinces (Nakorn Sawan, Nakorn Ratchasima, Samutprakarn and Songkla)

Sample size

$(400 \times 2) + 20\% = 960$ samples

Multi-Stage Sampling

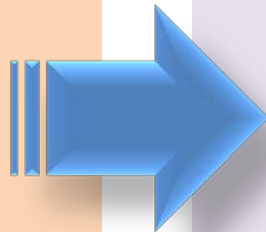


Independent Variable

AUDIT (Adjusted)

Drinking patterns

- A. Abstainer**
- B. Low risk**
- C. Hazardous**
- D. Harmful**



Dependent Variable

**Questionnaire developed
by researchers**

Work performance

- 1. Task-oriented**
- 2. Interpersonally-oriented**
- 3. Down-time**
- 4. Destructive and hazardous**

Work performance

Task-Oriented

Ability to accomplish assigned jobs or meet targets/expectations

Interpersonally-Oriented

Communication, teamwork, assistance to colleague, cooperation

Down-Time

Absenteeism, lateness, tardiness, sideline jobs etc.

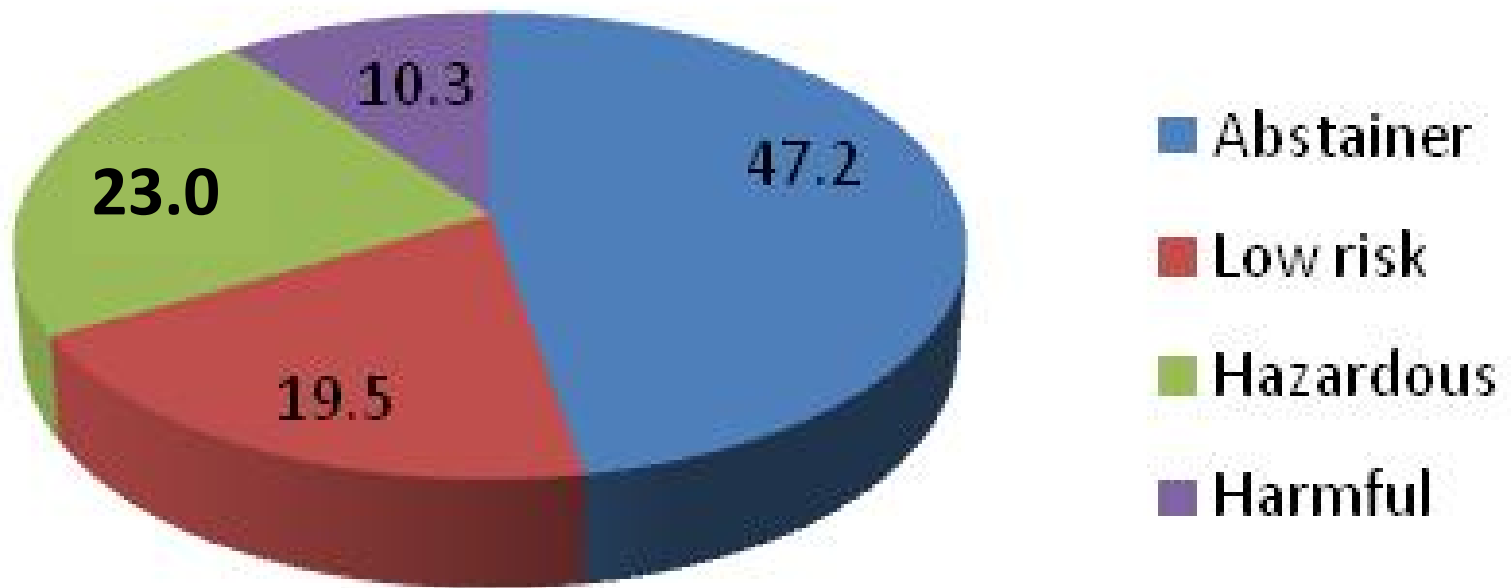
Destructive & Hazardous

Disobedience, stealing, violence, accident, destroying

Characteristics of the Samples

- **1,109 respondents**
- **Sex: male (64.7%)**
- **Age: 18-45 years (80%)**
- **Marital status: Married (44.6%)**
- **No kid (44.2%)**
- **Education: Tertiary or Vocational (30%)**
- **Disease: None (87.2%)**
- **Employment: Permanent (81.2%)**
- **Income: USD 300-500/month (42.5%)**
- **Shift work: Not required (60.3%)**
- **OT: Yes, on normal work days (41.6%)**
- **Work hours/wk: 40-56 hrs (56.5%)**
- **Year of service: 1-2 years (40.7%) and 5 years up (38.7%)**

Proportion of Drinkers/Drinking Patterns



Means and Standard Deviations of Work Performance by Drinking Patterns

Work Performance	Drinking Pattern	\bar{X}	S.D.
Task-Oriented	Abstainer	21.02	3.44
	Low risk	20.99	2.51
	Hazardous	20.62	2.53
	Harmful	19.44	3.73
Interpersonally-oriented	Abstainer	39.57	5.59
	Low risk	40.12	4.25
	Hazardous	39.71	3.70
	Harmful	37.80	4.87
Down-time	Abstainer	13.17	5.48
	Low risk	12.11	3.55
	Hazardous	13.19	4.58
	Harmful	16.40	6.99
Destructive & Hazardous	Abstainer	10.23	4.22
	Low risk	9.38	1.96
	Hazardous	10.20	4.07
	Harmful	12.18	4.68

Comparison of Work Performance between different drinking patterns

Work Aspects	Source	SS	df	MS	F	Sig
Task-Oriented	Between Groups	179.12	3	59.72	7.59	.00*
	Within Groups	4576.69	582	7.86		
	Total	4755.85	585			
Interpersonally-oriented	Between Groups	426.43	3	142.14	8.24	.00*
	Within Groups	10037.09	582	17.25		
	Total	10463.52	585			
Down-time	Between Groups	1640.83	3	546.95	23.93	.00*
	Within Groups	13303.52	582	22.86		
	Total	14944.35	585			
Destructive & Hazardous	Between Groups	670.08	3	223.36	17.49	.00*
	Within Groups	7473.71	582	12.77		
	Total	8104.79	585			

Statistically significant at $p < .05$

Significant Difference in Work Performance between drinking patterns

Task-oriented	Interpersonally-oriented	Down-time	Destructive & Hazardous
A > D (1.58)	A > D (1.77)	D > A (3.23)	A > B (.95)
B > D (1.55)	B > D (2.32)	D > B (4.29)	D > A (1.85)
C > D (1.18)	C > D (1.91)	D > C (3.21)	D > B (2.80)
			D > C (1.98)

Statistically significant at $p < 0.05$

A = Abstainer

B = Low risk

C = Hazardous

D = Harmful

Summaries

- **Half of the workers are drinkers.**
- **On average, the abstainers performed the best in task-oriented behavior, whereas low-risk drinkers performed the best in interpersonally, down-time and destructive behavior and harmful drinkers performed the worst in all aspects.**
- **The harmful drinkers significantly performed worse than the other groups in all aspects.**
- **Even though the low risk drinkers seemed to perform better than the abstainers in interpersonally and down-time behaviors but the differences were not statistically significant.**

Conclusions

Drinking could affect work performance in many ways. Thus, policy makers should consider enhancing alcohol control measures in the workplace to reduce negative consequences, while increase performance of the workforce.