



## REFERENCES

- Andrade, A. (2001). Facts about injuries: *preventing global injuries*. Department of Injuries and Violence Prevention Non communicable Disease & Mental Health. WHO.
- California Highway Patrol. (1994). 1993 Annual report of fatal and injury motor vehicle traffic accidents. Sacramento, CA: Author.
- Center for Disease Control. (1992b). Safety belt and helmet use among high school students United States, 1990. *Morbidity and Mortality Weekly Report*, 41(7): 111-114.
- Center for Disease Control. (1992c). Behaviors related to unintentional and intentional injuries among high school students United States, 1991. *Morbidity and Mortality Weekly Report*, 41(41): 760-772.
- Center for Disease Control. (1994f). Risk driving behaviors among teenagers Gwinnett County, Georgia, 1993. *Morbidity and Mortality Weekly Report*, 43(22): 405-409.
- Center for Disease Control. (1995d). Injury-Control recommendations: *Bicycle helmets*. *Morbidity and Mortality Weekly Report*, 44 (RR-1): 1-11.
- Center for Disease Control. (1997b). Youth risk behavior surveillance: *National College Health Risk Behavior Survey United States, 1995*. *Morbidity and Mortality Weekly Report*, 46(ss-6): 1-54.
- Courtenay, W. H. (Fall 2000). Behavioral factors associated with disease, injury, and death among men: *Evidence and Implications for prevention*. *Journal of Men's Studies* ;V.9 no 1 P.81-142.( <http://cdnet3.car.chula.ac.th/hwwssa/detail.nsp> )
- Dejoy, D.M. (1992). An examination of gender differences in traffic accident risk perception. *Accident Analysis and Prevention*, 24(3): 237-246.

- Department of injuries and violence prevention. (2002). World Health Day 2004 and World report on road traffic injury prevention. World Health Organization.
- Erikson, E.H ( 1963 ). *Childhood and society* (rev.ed. ). New York: Norton.
- Farrow & Brissing, P.(1990). *Risk for DWI: A new look at gender differences in drinking and driving influences, experiences and attitudes among new adolescent drivers*. *Health Education Quarterly*, 17(2): 213-221.
- Green, M. and Senders J.W. (1989). *Human Error in Road Accidents*. *Human Factors Science* Available from [ergo@ergogero.com](mailto:ergo@ergogero.com).
- Groves, R. (1989): *Survey error and survey costs*. New York: Wiley.
- Havighurst, R.J. (1972). *Development tasks and education* (3<sup>rd</sup> ed.). New York:McKay  
Available from [http:// www. who.int/whr/2002/chapter 4/en/index7.html](http://www.who.int/whr/2002/chapter4/en/index7.html)
- Jernigan, D.H. (2001). *Global status Report: Alcohol and Young people*. World Health Organization.
- Jessor,R.& Jessor,S.L.(1977).*Problem behavior and psychosocial development: A longitudinal study of youth*. New York: Academic Press.
- Klepp, K-I.(1987).*Onset and development of drinking and driving among adolescents*. Minnesota, Minneapolis.
- Murichun,W. (1998). *The behavior of private car drivers that caused traffic accident in Bangkok Metropolis*. Department of Sociological and Anthropology Chulalongkorn University.
- NHTSA; 2000a [cited in Center for Disease Control 14 October 2002.Teen Drivers]. Available from: [WWW.cdc.gov/ncipc/factsheets/teenmvh.htm](http://WWW.cdc.gov/ncipc/factsheets/teenmvh.htm) [2002, October 16]

- Pensuwon, B. (1996). Factors related to severity of injury from road traffic accident among inpatients at ROI-ET hospital. Department of Preventive and Social Medicine. Chulalongkorn University.
- Perry, C.L., & Murray, D.M. (1985). The prevention of adolescent drug abuse: Implications from etiological, developmental, behavioral, and environmental models. *Journal of Primary Prevention*, 6: 31-52.
- Phansavang W. (1996). The behavior of motorcycle drivers and traffic problem in Bangkok Metropolis. Faculty of Sociology and Anthropology.
- Pinch,W.J., Heck, M., & Vinal, D. ( 1986). Health needs and concerns of male adolescents. *Adolescence*, 21(84): 961-969.
- Presser, D.F., Williams, A.F.,& Lund, A. K. (1991). Characteristics of belted and unbelted drivers. *Accident Analysis and Prevention*, 23(6): 475-482.
- Satsanguan ,Ng. (2002). Traffic behavior on Bangkok Metropolis. Faculty of Political Sciences Chulalongkorn University.
- Secretary of Health and Human Services. (1993). Eighth Special Report the U.S. Congress on Alcohol and Health. Department on Health and Human Services.
- Shinar, D.(1978). Psychology on the road: *The human factor in Traffic Safety*. New York . John Wiley & Sons. .
- Singsri, D. (1999). Motor vehicle accidents or injuries among Drivers aged 18-59 years old in Thailand. Department of Social and Anthropology, Faculty of Political Sciences, Chulalongkorn University.
- Statistical yearbook 2000.National Statistical center. Lao PDR
- Statistical yearbook 2001.National Statistical center. Lao PDR

Thomas F. Babor, John C. Higgins- Biddle, John B. Saunders, Maristeta G. Moteiro. (2001). *AUDIT (The Alcohol Use Disorders Identification Test)* second edition. WHO.

Thomas, F. Babor, Juan Ramon de la Fente, John Saunders, Marcus Grant. (1992) *Program on Substance Abuse: AUDIT (The Alcohol Use Disorders Identification Test)*. World Health Organization.

Wen-Ta Chiu, Chia-Ying Kuo, Ching-Chang Hung and Marcelo Chen. The effect of the Taiwan Motorcycle Helmet Use Law on Head Injuries. May (2000), *American Journal of Public Health*.90,5(May):793-796.

WHO (2002).The world Health report: *Reducing Risk, Promoting Health Life*.

WHO. (2001). A summary of Global Status Report on Alcohol: *Management of Substance Dependence Non- communicable Diseases*. World Health Organization.

Wilson, J.R. & Robert E. M. (1990). *Drinking and Driving Advances in Research and Prevention*. The Guilford Press

World Health Organization. (2002). *Road Traffic Injuries: Role of public health*. WHO.

World Health Organization.(2002). *Chapter 4: Box 4.3 Road Traffic Injuries*.

## **APPENDICES**

## Appendix A

### Research Budget

Sl.no	Item	Unit	Price (B)	Unit Number	Total Budget
1	Transportation				
	– first field visit	times		2	887
	– second visit			2	864
2	Data collector training	Person	500	1	500
3	Pre-testing:				
	– Hiring charge	Person	300	2	600
	– Photocopy	Page	1	1008	1,008
4	Data collection				
	– Coordinator	Days	300	10	3,000
	– Hiring 5 persons	days	200	10	10,000
	– Hiring 1 person	Days	200	5	1,000
	– Photocopying	Page	1	2100	2,100
5	Photocopy ( thesis exam )	Paper	1	2000	2000
6	Typing ( thesis )	Page	50	60	3000
7	Editing ( thesis )	Page	30	100	3000
8	Binding ( thesis )	copy	10	200	2000
<b>Grand Total</b>					<b>29,959</b>

## Appendix B Schedule of Activities.

SN	Activities	2002				2003																											
		December				January				February				March				April				May				June				July			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Writing proposal	■																															
2	Consulting advisor		■																														
3	Submit first draft			■																													
4	Revise first draft				■																												
5	Submit for proposal exam					■	■																										
6	Proposal exam							■																									
7	Revise proposal ( if necessary )								■	■	■																						
8	Pre-testing the instrument									■	■																						
9	Instruction for survey manpower											■	■																				
10	Data collection												■	■	■	■																	
11	Data management													■	■	■																	
12	Data analysis															■	■	■															
13	Report writing																■	■	■	■													
14	Submit for final defense																				■												
15	Thesis exam																					■	■										
16	Revision ( if necessary )																													■			
17	Submit as the final product																																■





## Section 2. Driving style

No	Driving style	Very often	Often	rarely	Never
9	You overtake other vehicles whenever there is an opportunity				
10	You shift lanes to be ahead of others while waiting at the traffic junction				
11	You overtake other vehicles in heavy traffic whenever you have a chance				
12	Have police ever warned you for overtaking in a crowded zone?				
13	Has police ever fined you for overtaking “in no-overtake zone”?				
14	Had you ever an accident while you were overtaking other vehicles?				
15	While driving, you easily wonder off on thoughts				
16	You do mind to drive fast if your friend-passenger is in a hurry				
17	While driving ,you turn to your friends when they call out you				
18	You love to race to show your skills to your friends				
19	You are very confident with your motorbike and are not afraid to speed-up when it rains				
20	Traffic lights can be ignored if police is not around and the junction looks safe to cross				
21	When you meet friends on the road, you stop at their spot, even if this is a non-stop zone				
22	While your motorcycle was broken, you moved it towards the safer side of the road				
23	You don't mind to stop and pick-up your friends from non-stop zones				
24	You don't mind to stop at a crowded area				
25	You prefer to stop at bus stop areas because it is convenient				
26	When approaching a traffic junction you speed –up when the light-signal turns yellow as to cross the junction before the light turning red				
27	You slowed down your speed when you saw a yellow signal				
28	You followed a vehicle violating the traffic rules				
29	If the light-signal is red you stop before the stop line until you think it is safe to continue driving				

**Source of statement table: Ngamphit Satsanguan 2002**

30. Do you use helmet while driving a motorcycle?

- All the time       Often       rarely       Never

**Section 3: Drinking experience**

31. Do you use sometimes alcoholic-beverages?

- Yes       No

32. If yes, what is your favorite alcoholic drink?

- Beer       Local Wine       Whisky or other spirit       Wine

33. How often do you have a drink containing alcohol?

- monthly or less       2-4 times a month       2-3 time a week  
 4 or more times a week.

34. Usually how many drinks you have at one occasion?

- 1 or 2       3 or 4       5 or 6       7 to 9  
 10 or more

35. How often do you have six or more drinks on one occasion?

- Never       less than monthly       Monthly  
 Weekly       daily or almost daily

36. On what occasions do you usually have a drink?

- Family events (wedding)       Religious festival       Party with friends  
 National holiday       Week-end       Any occasion

37. With whom do you usually have a drink?

- Friends       Family members       Alone       Other

38. Where do you usually have a drink?

- At home       At my friend's house       Beer garden  
 In restaurant       At a karaoke bar

39. After having a drink do you usually drive your bike?

- Never       Rarely       Often       Always

**Section 4. Road traffic accident history**

40. Have you ever experienced a motorbike accident while driving during the last 3 years?

- Yes       No

41. If yes, how many times did you have a motorbike accident?

- 1-2       3-4       5-6       More than 6

43. In case you had one or more motorbike accidents while driving in the past did you have injuries?

- Yes       No

44. If yes, please tick the appropriate cells in the table below:

Injury description	1st		2nd		3rd		4th		5th	
	NA	A	NA	A	NA	A	NA	A	NA	A
No injuries										
External injuries										
Extremity fracture										
Face injury										
Thorax contusion										
Head & neck Contusion										
Contusion /rupture Some organ in abdomen										

NA= I took no alcohol

A= I had taken alcoholic drinks

**Thank you very much!**

Appendix D  
Questionnaire form Lao version

ແບບສອບຖາມ

ເລກຮຽນ \_\_\_\_\_  
ຊື່ \_\_\_\_\_

ເຖິງ: ທ່ານ ທີ່ ຕອບແບບສອບຖາມທີ່ຮຶກແຮງ.

ກະຮຸນາໝາຍ (✓) ຫຼືຕີນຂໍ້ຄວາມໃສ່ບ່ອນຫວ່າງໃນຄຳຕອບ ຕາມຄຳແນະນຳຂອງຜູ້ທີ່ແຈກແບບສອບຖາມ. ຜູ້  
ແຈກຢາຍແບບສອບຖາມມີຄວາມຍິນດີທີ່ຈະອະທິບາຍໃຫ້ທ່ານຊາບໃນກໍລະນີທີ່ທ່ານບໍ່ເຂົ້າໃຈຄຳຖາມ. ຂໍ້ມູນໃນ  
ແບບສອບຖາມນີ້ຈະຖືກເກັບເປັນຄວາມລັບຢ່າງດີ, ສະນັ້ນຂໍໃຫ້ທ່ານຈົ່ງໝັ້ນໃຈເພາະຈະບໍ່ມີໃຜຮູ້ວ່າທ່ານເປັນຜູ້  
ຕອບແບບສອບຖາມດັ່ງກ່າວ. ມັນມີຄວາມສຳຄັນທີ່ສຸດໃນການທີ່ທ່ານຕອບຄຳຖາມຕາມຄວາມເປັນຈິງ, ເພາະວ່າ  
ການສະໜອງຂໍ້ມູນຂອງທ່ານຈະເປັນການຊ່ວຍເຫລືອພວກເຮົາໃນການຊ່ວຍໃຫ້ຜູ້ຂັບຂີ່ປ່ອດພັຍຈາກຄູປະຕິ  
ເຫດຕາມໜັງຖະໜົນ.

- ຂໍ້ມູນໃນແບບສອບຖາມປະກອບດ້ວຍ 4 ພາກສ່ວນ:
- 1. ຂໍ້ມູນດ້ານປະຊາກອນ
  - 2. ຂໍ້ມູນດ້ານປະລິບປະກາຍການຂັບຂີ່ລົດຈັກ
  - 3. ຂໍ້ມູນດ້ານປະລິບການການດື່ມສຸຣາ
  - 4. ປະຫວັດການປະລິບອຸປະຕິເຫດ

໒ ພາກທີ 1: ຂໍ້ມູນດ້ານປະຊາກອນ

- 1. ເພດ:  ຊາຍ  ຍິງ
- 2. ອາຍຸ .....ປີ
- 3. ຊັ້ນຮຽນ:  
 ມັ4  ມັ5  ມັ6
- 4. ປີໃດທີ່ທ່ານເລີ່ມຂັບຂີ່ລົດຈັກ -----
- 5. ທ່ານມີໃບອະນຸຍາດຂັບຂີ່  
 ມີ  ບໍ່ມີ
- 6. ຖ້າມີ, ໄລຍະເວລາທີ່ໄດ້ໃບອະນຸຍາດຂັບຂີ່ມາແຈ້ງມັດຈຸບັນໄດ້ຈັກປີ ?  
 1ປີ  2ປີ  3ປີ  ຫລາຍກວ່າ 3ປີ
- 7. ລາຍໄດ້ຂອງຄອບຄົວທ່ານ( ຄອບຄົວພໍ່ແມ່ຫຼືຜູ້ປົກຄອງ) .....ມີໄບ/ເດີເອນ
- 8. ລາຍໄດ້ຕໍ່ເດີເອນຂອງທ່ານເອງ) .....ມີໄບ/ເດີເອນ

໒ ພາກທີ 2. ປະສົບການການຂັບຂີ່ລົດຈັກຂອງທ່ານ

		ເລື້ອຍໆ	ຫລາຍເທື່ອ	ນ້ອຍເທື່ອ	ບໍ່ເຄີຍ
9	ທ່ານສາມາດແຂ່ງລົດຄັນອື່ນໄດ້ທ່ານຈະແຂ່ງທັນທີ				
10	ຂະນະທີ່ທ່ານຢຸດລົດລໍສັນຍານໄຟສາກມີລົດຈໍານວນຫລາຍທ່ານມັກຂັບເຂົ້າຊ່ອງທາງ( ເລນ)ອື່ນເພື່ອແຂ່ງໄປທາງໜ້າແລະເມື່ອມີໂອກາດກໍຈະກັບເຂົ້າຊ່ອງທາງ (ເລນ) ເດີມ				
11	ໃນພາວະການຈໍລະຈອນແທ້ໝາເມື່ອມີໂອກາດທ່ານມັກຂັບລົດແຂ່ງຄັນອື່ນ				
12	ທ່ານເຄີຍຖືກເຈົ້າໜ້າທີ່ຕໍາຫລວດອອກໃບສັ່ງເນື່ອງຈາກທ່ານຂັບແຂ່ງໃນທີ່ຂັບຂັນ				
13	ໃນເຂດການຈໍລະຈອນແທ້ໝາເຂດຫ້າມແຂ່ງທ່ານຂັບລົດແຂ່ງທໍາລົດຄັນອື່ນແຕ່ບໍ່ຖືກຈັບ				
14	ທ່ານເຄີຍປະສົບອຸປະຕິເຫດຂະນະຂັບລົດແຂ່ງຄັນອື່ນ				
15	ຂະນະຂັບລົດສາຍຕາຂອງທ່ານມັກຈິດຈໍອອກຂ້າງທາງ				
16	ທ່ານຈະຂັບລົດຕາມໃຈຜູ້ຊອນທ້າຍທ້ອງທີ່ສຽງຕໍ່ອຸປະຕິເຫດ				
17	ຂະນະທີ່ທ່ານຂັບລົດດ້ວຍຄວາມໄວສູງຫາກມີຄົນຢູ່ຂ້າງທາງເອີ້ນທ່ານທ່ານຈະຂັບລົດເຂົ້າໄປຫາທັນທີ				
18	ທ່ານເຄີຍຂັບລົດສາຍໄປສາຍມາ(ຊິກແຊກ)ເພື່ອສະແດງຄວາມສາມາດໃນການຂັບຂີ່ແລະເບັນທີ່ຍອມຮັບ				
19	ເຖິງວ່າຝົນຕົກຖົນນົມທ່ານກໍຂັບລົດດ້ວຍຄວາມໄວສູງ				
20	ທ່ານເຄີຍຂັບລົດຝ່າຝົນກົດຈໍລະຈອນເມື່ອບໍ່ເຫັນເຈົ້າໜ້າທີ່ຕໍາຫລວດ				
21	ເວລາທີ່ພົບເພື່ອນຢູ່ກາງຖະໜົນ ທ່ານຈະຢຸດລົດທັນທີເຖິງວ່າບ່ອນນັ້ນເບັນເຂດຫ້າມຢຸດກໍຕາມ				
22	ໃນກໍລະນີລົດທ່ານເພກາງທາງທ່ານມັກຈະນໍາລົດອອກຈາກຖະໜົນທັນທີ				
23	ທ່ານຈອດຮັບຜູ້ໂດຍສານບລີເວນທີ່ມີເຄື່ອງໝາຍຂາວແດງຕາມຂອບຖະໜົນ				
24	ທ່ານມັກຈອດລົດຢູ່ກາງທາງຕາມບລີເວນທີ່ມີການຈໍລະຈອນແທ້ໝາ				

25	ທ່ານນັກຈອດລົດລຳຜັດໂດຍສານໄກ້ບໍລິເວນປ້າຍລົດປະຈຳທາງ				
26	ເມື່ອເຖິງທາງແຍກທີ່ມີສັນຍານໄຟເຫລືອງປາກົດທ່ານຈະເລ່ງເຄື່ອງເພື່ອໃຫ້ລົດຜ່ານທາງແຍກໄປໂດຍໄວ				
27	ເມື່ອທ່ານເຫັນສັນຍານໄຟເຫລືອງກະພິບບໍລິເວນທາງແຍກທ່ານຈະລຸດຜ່ອນຄວາມໄວລົງ				
28	ເມື່ອສັນຍານໄຟແດງຫາກໍ່ປາກົດຂຶ້ນແລະລົດຄັນໜ້າຂອງທ່ານໄດ້ຂັບຝ່າສັນຍານໄຟທ່ານຈະຂັບລົດຕາມຄັນໜ້າໄປຕິດງຸກັນ				
29	ເມື່ອທ່ານເຫັນສັນຍານໄຟແດງຂຶ້ນບໍລິເວນທາງແຍກທ່ານຈະຢຸດລົດຫລັງເສັ້ນຢຸດລົດ ເມື່ອເຫັນວ່າປອດໄພແລ້ວຈຶ່ງຂັບຕໍ່ໄປ				

30.ທ່ານສວມໃສ່ໝວກກັນນອກຂະນະຂັບຂີ່ລົດຈັກ

- ທຸກຄັ້ງ     ສ່ວນຫລາຍ     ນ້ອຍເທື່ອ     ບໍ່ເຄີຍ

☛ ພາກທີ 3: ປະສົບການການດື່ມສຸຣາ

31.ທ່ານເຄີຍດື່ມສຸຣາຫລືບໍ່?     ເຄີຍ     ບໍ່ເຄີຍ

32.ຖ້າເຄີຍ, ສຸຣາຊະນິດໃດທີ່ທ່ານເຄີຍດື່ມ?

- ເບຍ     ເຫລົ້າຂາວ     ເຫລົ້າວິສກີ     ເຫລົ້າວາຍ

33.ຄວາມຖີ່ຂອງການດື່ມສຸຣາຂອງທ່ານ

- ເປັນປະຈຳທຸກເດືອນຫລືນອ້ຍກວ່ານັ້ນ     2ຫາ4 ເທື່ອຕໍ່ເດືອນ     2ຫາ3 ເທື່ອຕໍ່ອາທິດ  
 4ເທື່ອຕໍ່ອາທິດຫລືຫລາຍກວ່ານັ້ນ

34.ປົກກະຕິທ່ານດື່ມຄັ້ງນຶ່ງປະມານຫລາຍປານໃດ?

- 1ຫາ2ຈອກ     3ຫາ4ຈອກ     5ຫາ6ຈອກ     7ຫາ9ຈອກ  
 10 ຈອກຫລືຫລາຍກວ່າ

35.ຄວາມຖີ່ທີ່ທ່ານເຄີຍດື່ມຄັ້ງລະ 6ຈອກຂຶ້ນໄປ

- ບໍ່ເຄີຍ     ຕໍ່າກວ່າເດືອນລະເທື່ອ     ປະຈຳເດືອນ     ປະຈຳອາທິດ  
 ປະຈຳວັນຫລືເກືອບທຸກວັນ

36.ເນື່ອງໃນໂອກາດໃດທີ່ທ່ານດື່ມສຸຣາ

- ໂອກາດພິເສດພາຍໃນຄອບຄົວ     ວັນບຸນທາງສາດສະໜາ     ພົບປະສ້າງສັນກັບເພື່ອນ  
 ວັນສຳຄັນແຫ່ງຊາດ     ຫ້າຍອາທິດ     ບໍ່ຈຳກັດເວລາແລະໂອກາດ

37.ທ່ານດື່ມກັນໃຜ?

- ເພິ່ນ     ສະມາຊິກຄົນຄອບຄົວ     ເພິ່ນຄົນຕຽວ     ບໍ່ມີ

38.ສະຖານທີ່ທີ່ທ່ານນັກດຶມເລື້ອຍໆ

- ຢູ່ເຮືອນຕົນເອງ       ຢູ່ເຮືອນໝູ່       ສວນໄບຍ       ຮ້ານອາຫານ  
 ບາຄາຣາໂອເກະ

39.ທ່ານເຄີຍຂັບຂີ່ລົດຈັກພາຍຫລັງການດຶມເຫລົ້າຫລິບ?

- ບໍ່ເຄີຍ       ນອ້ຍເທື່ອ       ເລື້ອຍໆ       ທຸກຄັ້ງ

໘ ພາກທີ4:ປະຫວັດການເກີດອຸປະຕິເຫດ

40.ທ່ານເຄີຍປະສົບອຸປະຕິເຫດຈາກການຂັບຂີ່ລົດຈັກໃນໄລຍະ3ປີຜ່ານມາຫລິບ ( ທັງມີການບາດເຈັບ ແລະ ເສັຽຫາຍຫລິບມີການບາດເຈັບເສັຽຫາຍ)       ເຄີຍ       ບໍ່ເຄີຍ

41.ຖ້າເຄີຍ,ທ່ານປະສົບອຸປະຕິເຫດລວມຈັກຄັ້ງໃນໄລຍະ3ປີທີ່ຜ່ານມາ?

- 1ຫາ2ຄັ້ງ       3ຫາ4ຄັ້ງ       5ຫາ6ຄັ້ງ       ຫລາຍກວ່າ6ຄັ້ງ

42.ໃນກໍລະນີທີ່ທ່ານປະສົບອຸປະຕິເຫດທອ້ງຖະໜົນຈາກການຂັບຂີ່ລົດຈັກພາຍຫລັງດຶມສຸຣາ1ຄັ້ງຂຶ້ນໄປໃນໄລຍະ3ປີທີ່ຜ່ານມາທ່ານເຄີຍໄດ້ຮັບບາດເຈັບຫລິບ?       ເຄີຍ       ບໍ່ເຄີຍ

43.ຖ້າເຄີຍ,ກະລຸນາໝາຍຫອ້ງທີ່ເໝາະສົມກັບການບາດເຈັບຂອງທ່ານໃນຕາຕະລາງລຸ່ມນີ້

ການບາດເຈັບ	ຄັ້ງທີ1		ຄັ້ງທີ2		ຄັ້ງທີ3		ຄັ້ງທີ4		ຄັ້ງທີ5		ຄັ້ງທີ6	
	ດ	ບດ	ດ	ບດ	ດ	ບດ	ດ	ບດ	ດ	ບດ	ດ	ບດ
ບໍ່ມີການບາດເຈັບ												
ບາດເຈັບຜິວໜັງທາງນອກ												
ແຂນ ຂ້າ ຫັກ												
ບາດເຈັບບໍລິເວນໃບໜ້າ												
ມີການກະທົບໜ້າເອິກ												
ກະທົບຕົວແລະຄໍ												
ກະທົບອະໄວຍະວະພາຍໃນສັງເກດ												

ຄວາມໝາຍຫຍໍ້ :

ດ = ປະສົບອຸປະຕິເຫດຈາກການຂັບຂີ່ພາຍຫລັງດຶມສຸຣາ

ບດ = ປະສົບອຸປະຕິເຫດຈາກການຂັບຂີ່ທີ່ບໍ່ໄດ້ດຶມສຸຣາ

## ຂໍຂອບໃຈໃນການຮ່ວມມືຂອງທ່ານ

## **Appendix E**

### **Operational Definition**

- License : Can be obtained earliest at the age of 16.
- Drinking : Drinking of minimum one alcohol beverage.
- Driving : Driving a motorcycle on the public roads.
- Accident : A crash or collision while driving a motorcycle on a public road with or without injuries.
- Driving style : Refers to behavior related to overtaking, reckless driving , violating traffic code and stop at non stop zone.



## Appendix F

### Results

**F1 Distribution of Frequencies and Proportions on Family and Own Income.**

	<b>Income</b>			
	Freq.	%	Mean	SD
<b>Family</b>				
< 300,000	62	20.0		
300,000-600,000	106	34.2		
600,001-900,000	25	8.1		
>900000	117	37.7		
<b>Total</b>	<b>310</b>	<b>100.0</b>	<b>1245120</b>	<b>2538579</b>
<b>Own income</b>				
<100,000	128	47.2		
100,001-200,000	93	34.3		
200,001-300,000	28	10.3		
>300,000	22	8.1		
<b>Total</b>	<b>271</b>	<b>100.0</b>	<b>113.535</b>	<b>90.235</b>

## F2 Distribution of Frequencies and Proportions on Start Driving Age and

### Driving License

<b>Start driving age (years)</b>	<b>n</b>	<b>%</b>	<b>Median</b>
7	2	.5	17
8	1	.3	
9	1	.3	
10	2	.5	
11	23	5.8	
12	34	8.6	
13	69	17.5	
14	102	25.9	
15	88	22.3	
16	43	10.9	
17	21	5.3	
18	7	1.8	
19	1	.3	
<b>Total</b>	<b>394</b>	<b>100.0</b>	
<b>License</b>			
No	321	81.5	
Yes	73	18.5	
<b>Total</b>	<b>394</b>	<b>100.0</b>	
<b>License holding</b>			<b>1</b>
1 year	45	60.8	
2 years	14	18.9	
3 years	8	12.2	
>3 years	6	8.1	
<b>Total</b>	<b>73</b>		

## F3 Distribution of Frequencies and Proportions on Driving Experience

<b>Driving experience (years)</b>	<b>n</b>	<b>%</b>
	<b>394</b>	
<1	46	11.7
1-3	273	69.3
4-6	57	14.5
7-9	16	4.1
>9	2	0.5

**F4 Distribution of Frequencies and Proportions on the Type of Alcohol Beverage Use.**

<b>Alcohol beverage</b>	<b>n (279)</b>	<b>%</b>
Beer	222	56.3
Local wine	5	1.3
Whisky	21	5.3
Wine	31	7.9

**F5 Distribution of Proportions of Gender on Driving Experience.**

	<b>Gender</b>			$\chi^2$	<b>p-value</b>
	Female	Male	Total		
	%	%	n		
<b>License</b>					
No	52.0	48.0	321	1.107	.293
Yes	45.2	54.8	73		
<b>Possessing a Driving License</b>					
1 year	51.1	48.9	45	1.710a	.635
2 year s	35.7	64.3	14		
3 year	33.3	66.7	9		
$\geq 3$ years	40.0	60.0	5		

**a:** For Chi-square 20% cell count < 5

**F6 Association between Age and License and License Holding.**

	Age			Total	$\chi^2$	p-value
	13-15	16-18	>18			
<b>License</b>					7.141	.028
No	24.9	71.0	4.0	321	81.47	
Yes	13.7	76.7	9.6	73	18.52	
<b>License holding</b>					6.623a	.357
1 year	15.6	80.0	4.4	45	61.64	
2 years	21.4	64.3	14.3	14	19.17	
3 years	0.0	77.8	22.2	9	12.32	
>3 years	0.0	80.0	20.0	5	6.80	

a: For Chi-square 20% cell count < 5

## F7 Chi-square Test for association Gender and Driving Style

	Gender				$\chi^2$	p-value
	Female	Male	Total			
	%	%	n	%		
<b>Overtaking in the restricted zone</b>						
<b>Overtook other vehicles</b>					16.540	.001
- Never	52.2	47.0	23	5.8		
- Rarely	58.9	41.1	231	58.6		
- Often	38.0	62.0	79	20.0		
- Very often	36.1	63.9	61	15.5		
<b>Shifted lane to ahead</b>					3.553	.315
- Never	52.5	47.5	118	29.9		
- Rarely	49.7	50.3	191	48.5		
- Often	56.3	43.8	64	16.2		
- Very often	33.3	66.7	21	5.3		
<b>Overtook in heavy traffic</b>					12.848	.005
- Never	60.1	39.9	163	41.4		
- Rarely	45.0	55.0	169	42.9		
- Often	50.0	50.0	40	10.2		
- Very often	27.3	72.7	22	5.6		
<b>Warned for overtaking</b>					22.770a	<.001
- Never	57.0	43.0	309	91.4		
- Rarely	31.1	68.9	61	7.9		
- Often	20.0	80.0	20	.5		
- Very often	25.0	75.0	4	.3		
<b>Fined for overtaking</b>					22.478a	<.001
- Never	54.2	45.8	360	78.4		
- Rarely	12.9	87.1	31	15.5		
- Often	0.0	100.0	2	5.1		
- Very often	100.0	0.0	1	1.10		
<b>Had accidents overtaking</b>					.897a	.826
- Never	51.6	48.4	349	88.6		
- Rarely	43.6	56.4	39	9.9		
- Often	50.0	50.0	4	1.0		
- Very often	50.0	50.0	2	.5		
<b>Reckless driving behavior</b>						
<b>Driving on off thoughts</b>					2.866	.413
- Never	51.1	48.9	92	23.4		
- Rarely	48.4	51.6	219	55.6		
- Often	51.9	48.1	52	13.2		
- Very often	64.5	35.5	31	7.9		
<b>Driving fast when friend ask</b>					8.047a	.045
- Never	54.0	46.0	274	69.5		
- Rarely	42.6	57.4	108	27.4		
- Often	33.3	6.7	9	2.3		
- Very often	100.0	0.0	3	.8		
<b>Turned to friend</b>					2.409	.477
- Never	51.0	49.0	247	62.7		
- Rarely	52.7	47.3	129	32.7		
- Often	30.0	70.0	10	2.5		

	Gender				$\chi^2$	p-value
	Female	Male	Total			
	%	%	n	%		
- Very often	37.5	62.5	8	2.0	26.154	<.001
<b>Driving for show skill</b>						
- Never	56.9	43.1	318	80.7		
- Rarely	27.9	72.1	61	15.5		
- Often	10.0	90.0	10	2.5		
- Very often	20.0	80.0	5	1.3	3.130a	.372
<b>Driving fast in rain</b>						
- Never	53.7	46.3	270	68.5		
- Rarely	44.7	55.3	114	28.9		
- Often	42.9	57.1	7	1.8		
- Very often	33.3	66.7	3	8	5.268a	.153
<b>Traffic light ignored</b>						
- Never	54.7	45.3	243	6.7		
- Rarely	46.4	53.6	125	31.7		
- Often	33.3	66.7	21	5.3		
- Very often	40.0	60.0	5	1.3	6.703a	.028
<b>Stop at non stop area</b>						
<b>Stop in non stop zone</b>						
- Never	51.6	48.4	287	72.8		
- Rarely	50.5	49.5	97	24.6		
- Often	12.5	87.5	8	2.0		
- Very often	100.0	0.0	2	.5	10.744	.013
<b>Moved broken motorbike*</b>						
- Never	50.0	50.0	84	21.3		
- Rarely	59.4	40.6	64	16.2		
- Often	67.3	32.7	49	12.4		
- Very often	44.2	55.8	197	50.0	6.319a	.097
<b>Picked up friend at non stop zone</b>						
- Never	53.2	46.8	263	66.9		
- Rarely	49.5	50.5	107	27.2		
- Often	25.0	75.0	20	5.1		
- Very often	66.7	33.3	3	.8	9.369a	.025
<b>Stop at crowded area</b>						
- Never	53.0	47.0	270	68.5		
- Rarely	46.1	53.9	102	25.9		
- Often	29.4	70.6	17	4.3		
- Very often	100.0	0.0	5	1.3	17.107	.001
<b>Stop at bus stop area</b>						
- Never	57.7	42.3	234	59.4		
- Rarely	42.6	57.4	122	31.0		
- Often	50.0	50.0	22	5.6		
- Very often	12.5	87.5	16	4.1	3.075	.380
<b>Violate traffic signal</b>						
<b>Speed up yellow light signal</b>						
- Never	46.3	53.7	108	27.4		
- Rarely	51.2	48.8	211	53.6		
- Often	50.0	50.0	42	10.7		
- Very often	63.6	36.4	33	8.4		

	Gender				$\chi^2$	p-value
	Female	Male	Total			
	%	%	n	%		
<b>Slow down at yellow signal *</b>					2.673	.445
- Never	61.5	38.5	39	9.9		
- Rarely	53.2	46.8	77	19.5		
- Often	46.8	53.2	79	20.1		
- Very often	49.2	53.8	199	50.5		
<b>Followed violating vehicle</b>					6.533	.088
- Never	54.3	45.7	221	56.1		
- Rarely	50.8	49.2	120	30.5		
- Often	40.0	60.0	35	8.9		
- Very often	27.8	72.2	18	4.6		
<b>Stop before stop line*</b>					1.997	.573
- Never	53.8	46.2	91	23.4		
- Rarely	54.9	45.1	51	12.9		
- Often	54.4	45.5	57	14.5		
- Very often	47.2	52.8	195	49.5		

a: For Chi-square 20% cell count < 5

\* Positive question

**F8 Associations between Gender Alcohol Beverage and Drinking Occasion**

	Gender			$\chi^2$	p-value
	Female	Male	Total		
<b>Type of alcohol</b>	%	%	n	7.136	.28
Beer	44.6	55.4	222	56.3	
Local wine	40.0	60.0	5	1.3	
Whisky	19.0	81.0	21	5.3	
Wine	58.1	41.9	31	7.9	
<b>Drinking occasion</b>				-	-
Family event	45.6	54.4	68	24.4	
Religious festival	45.8	54.2	24	8.6	
Party with friends	43.2	56.8	146	52.3	
National holiday	14.3	85.7	7	2.5	
Weekend	0.0	100	5	1.8	
Any occasion	58.6	41.4	29	10.4	
<b>Drinking company</b>				2.054	.561
Friends	42.8	57.2	222	79.3	
Family	52.8	47.2	36	12.9	
Other	42.9	57.1	21	7.5	
<b>Drinking place</b>				8.164	.086
Home	53.4	46.6	58	20.7	
Friend's house	45.9	54.1	133	47.5	
Beer garden	38.5	61.5	39	13.9	
Restaurant	19.0	81.0	21	7.5	
Karaoke	41.4	58.6	29	10.4	



**F9 Association between Drinking Place, Gender and Age**

	Age			Total		$\chi^2$	p-value
	13-15	16-18	>18	n	%		
<b>Type of alcohol</b>						44.829	<.001
Beer	12.6	79.3	8.1	222	56.3		
Local wine	0.0	100.0	0.0	5	1.3		
Whisky	23.8	71.4	4.8	21	5.3		
Wine	48.4	51.6	0.0	31	7.9		
<b>Drinking occasion</b>						15.129a	.122
Family event	29.4	66.2	4.4	68	24.4		
Religious festival	4.2	87.5	8.3	24	8.6		
Party with friends	16.4	76.0	7.5	146	52.3		
National holiday	14.3	85.7	0.0	7	2.5		
Weekend	0.0	80.0	20.0	5	1.8		
Any occasion	6.9	86.2	6.9	29	10.4		
<b>Drinking company</b>						11.193a	.077
Friends	14.0	77.9	8.1	222	79.3		
Family	33.3	66.7	0.0	36	12.9		
Other	23.8	71.4	4.8	21	7.5		
<b>Drinking place</b>						8.505a	.386
Home	25.9	70.7	3.4	58	20.7		
Friend's house	14.3	77.4	8.3	133	47.5		
Beer garden	15.4	82.1	2.6	39	13.9		
Restaurant	23.8	66.7	9.5	21	7.5		
Karaoke	10.3	79.3	10.3	29	10.4		

a: For Chi-square 20% cell count < 5

**F10 Association between Family Income and Own Income and Drinking**

		<b>Drinking</b>			<b><math>\chi^2</math></b>	<b>p-value</b>
		No drink	Drink	Total		
<b>Family income</b>					3.820	.282
<300,000	Count	20	42	62		
	%	32.3	67.7	100.0		
300,001	Count	30	76	106		
to	%	28.3	71.7	100.0		
600,000						
600,001	Count	3	22	25		
to	%	12.0	88.0	100.0		
900,000						
>900,000	Count	31	86	117		
	%	26.5	73.5	100.0		
Total	Count	84	226	310		
	% of Total	27.1	72.9	100.0		
<b>Own income</b>					.283	.963
<100,000	Count	34	94	128		
	%	26.6	73.4	100.0		
100,000	Count	26	67	93		
to	%	28.0	72.0	100.0		
200,000						
200,001	Count	8	20	28		
to	%	28.6	71.4	100.0		
300,000						
> 300,000	Count	7	15	22		
	%	31.8	68.2	100.0		
Total	Count	75	196	271		
	%	27.7	72.3	100.0		

**F11 Association between Drinking Experience and Driving Style**

	<b>Drinking</b>				$\chi^2$	<b>p-value</b>
	No drink	Drink	Total			
	%	%	n	%		
<b>Overtaking in the restricted zone</b>						
<b>Overtook other vehicles</b>					13.067	.003
- Never	34.8	65.2	23	5.8		
- Rarely	35.5	64.5	321	58.6		
- Often	19.0	81.0	79	20.1		
- Very often	16.4	83.6	61	15.5		
<b>Shifted lane to ahead</b>					2.124	.547
- Never	33.1	66.9	118	29.9		
- Rarely	28.8	71.2	191	48.5		
- Often	26.6	73.4	64	16.2		
- Very often	19.0	81.0	21	5.3		
<b>Overtook in heavy traffic</b>					5.546	.136
- Never	35.6	64.4	163	4.4		
- Rarely	24.9	75.1	169	42.9		
- Often	25.0	75.0	40	10.2		
- Very often	22.7	77.3	22	5.6		
<b>Warned for overtaking</b>					16.468a	.001
- Never	34.0	66.0	309	78.4		
- Rarely	9.8	90.2	61	15.5		
- Often	15.0	85.0	20	5.1		
- Very often				1.0		
<b>Fined for overtaking</b>					12.416a	.006
- Never	31.7	68.3	360	91.4		
- Rarely	3.2	96.8	31	7.9		
- Often	0.0	100.0	2	.5		
- Very often	0.0	100.0	1	.3		
<b>Had accidents overtaking</b>					5.378a	.146
- Never	30.9	69.1	349	88.6		
- Rarely	17.9	82.1	39	9.9		
- Often	0.0	100.0	4	1.0		
- Very often	0.0	100.0	2	.5		
<b>Reckless driving behavior</b>						
<b>Driving on off thoughts</b>					11.993	.007
- Never	35.9	64.1	92	23.4		
- Rarely	31.1	68.9	219	55.6		
- Often	9.6	90.4	52	13.2		
- Very often	29.0	71.0	31	7.9		
<b>Driving fast when friend ask</b>					10.569a	.014
- Never	33.2	66.8	274	69.5		
- Rarely	19.4	80.6	108	27.4		
- Often	11.1	88.1	9	2.3		
- Very often	66.7	33.3	3	.8		
<b>Turned to friend</b>					1.311a	.726
- Never	28.7	71.3	247	62.7		
- Rarely	31.0	69.0	129	32.7		
- Often	30.0	70.0	10	2.5		
- Very often	12.5	87.5	8	2.0		

	Drinking				$\chi^2$	p-value
	No drink	Drink	Total			
	%	%	n	%		
<b>Driving for show skill</b>					21.315a	<.001
- Never	34.3	65.7	318	80.7		
- Rarely	8.2	91.8	61	15.5		
- Often	0.0	100.0	10	2.5		
- Very often	20.0	80.0	5	1.3		
<b>Driving fast in rain</b>					11.424a	.010
- Never	34.1	65.9	270	68.5		
- Rarely	19.3	80.7	114	28.9		
- Often	0.0	100.0	7	1.8		
- Very often	33.3	66.7	3	.8		
<b>Traffic light ignored</b>					11.560a	.009
- Never	34.6	65.4	243	61.7		
- Rarely	23.2	76.8	125	31.7		
- Often	9.5	90.5	21	5.3		
- Very often	0.0	100.0	5	1.3		
	<b>Stop at non stop area</b>					
<b>Stop in non stop zone</b>					7546a	.056
- Never	32.4	67.6	287	72.8		
- Rarely	22.7	77.3	97	24.6		
- Often	0.0	100.0	8	2.0		
- Very often	0.0	100.0	2	.5		
<b>Moved broken motorbike*</b>					2.418	.490
- Never	32.1	67.9	84	21.3		
- Rarely	34.4	65.6	64	16.2		
- Often	22.4	77.6	49	12.4		
- Very often	27.9	72.1	197	50.0		
<b>Picked up friend at non stop zone</b>					11.076a	.011
- Never	33.5	66.5	263	66.9		
- Rarely	19.6	80.4	107	27.2		
- Often	15.0	85.0	20	5.1		
- Very often	66.7	33.3	3	.8		
<b>Stop at crowded area</b>					4.787a	.188
- Never	31.9	68.1	270	68.5		
- Rarely	24.5	75.5	102	25.9		
- Often	11.8	88.2	17	4.3		
- Very often	40.0	60.0	5	1.3		
<b>Stop at bus stop area</b>					7.073a	.070
- Never	34.2	65.8	234	59.4		
- Rarely	21.3	78.7	122	31.0		
- Often	22.7	77.3	22	5.6		
- Very often	25.0	75.0	16	4.1		
	<b>Violate traffic signal</b>					
<b>Speed up yellow light signal</b>					7.712	.052
- Never	38.0	62.0	108	27.4		
- Rarely	27.0	73.0	211	53.6		
- Often	16.7	83.3	42	10.7		
- Very often	30.3	69.7	33	8.4		

	Drinking				$\chi^2$	p-value
	No drink	Drink	Total			
	%	%	n	%		
<b>Slow down at yellow signal *</b>					8.712	.033
- Never	41.0	59.0	39	9.9		
- Rarely	16.9	83.1	77	19.5		
- Often	30.4	69.4	79	20.1		
- Very often	31.2	68.8	199	50.5		
<b>Followed violating vehicle</b>					8.837	.032
- Never	33.0	67.0	221	56.1		
- Rarely	28.3	71.7	120	30.5		
- Often	8.6	91.4	35	8.9		
- Very often	27.8	72.2	18	4.6		
<b>Stop before stop line*</b>					5.803	.122
- Never	31.9	68.1	91	23.1		
- Rarely	15.7	84.3	51	12.9		
- Often	35.1	64.9	57	14.5		
- Very often	29.7	70.3	195	49.5		

a: For Chi-square 20% cell count < 5

**F12 Association between Driving after Drinking and Driving Style**

	<b>Driving After Drinking</b>				$\chi^2$	p-value
	No	Yes	Total			
	%	%	n	%		
<b>Overtaking in the Restricted Zone</b>						
<b>Overtook Other Vehicles</b>					18.051	<.001
- Never	81.8	18.2	22	5.9		
- Rarely	57.1	42.9	219	58.2		
- Often	41.6	58.4	77	20.5		
- Very often	37.9	62.1	58	15.4		
<b>Shifted Lane to Ahead</b>					8.499	.037
- Never	62.4	37.6	109	29.0		
- Rarely	51.4	48.6	185	49.2		
- Often	42.6	57.4	61	16.2		
- Very often	38.1	61.9	21	5.6		
<b>Overtook in Heavy Traffic</b>					9.817	.020
- Never	60.8	39.2	153	40.7		
- Rarely	46.1	53.9	165	43.9		
- Often	40.5	59.5	37	9.8		
- Very often	61.9	38.1	21	5.6		
<b>Warned for Overtaking</b>					10.608a	.014
- Never	54.7	45.3	342	91.0		
- Rarely	29.0	71.0	31	8.2		
- Often	0.0	100.0	2	.5		
- Very often	100.0	0.0	1	.3		
<b>Fined for Overtaking</b>						
- Never	55.6	44.4	293	77.9	5.851a	.119
- Rarely	41.7	58.3	60	16.0		
- Often	36.8	63.2	19	5.1		
- Very often	50.0	50.0	4	1.1		
<b>Had Accidents Overtaking</b>					12.228a	.007
- Never	55.4	44.6	332	88.3		
- Rarely	31.0	68.4	38	10.1		
- Often	0.0	100.0	4	1.1		
- Very often	50.0	50.0	2	.5		
<b>Reckless Driving Behavior</b>						
<b>Driving on off Thoughts</b>					5.844	.119
- Never	58.8	41.2	85	22.6		
- Rarely	54.1	45.9	209	55.6		
- Often	39.2	60.8	51	13.6		
- Very often	45.2	54.8	31	8.2		
<b>Driving Fast when friend ask</b>					6.818a	.078
- Never	56.5	43.5	260	69.1		
- Rarely	43.3	56.7	104	27.7		
- Often	33.3	66.7	9	2.4		
- Very often	66.7	33.3	3	.8		
<b>Turned to Friend</b>					6.049a	.109
- Never	53.2	46.8	235	62.5		
- Rarely	54.8	45.2	124	33.0		
- Often	22.2	77.8	9	2.4		
- Very often	25.0	75.0	8	2.1		
<b>Driving for show skill</b>					23.111a	<.001

	<b>Driving After Drinking</b>				$\chi^2$	p-value
	No	Yes	Total			
	%	%	n	%		
- Never	58.3	41.7	300	79.8		
- Rarely	26.2	73.8	61	16.2		
- Often	30.0	70.0	10	2.7		
- Very often	60.0	40.0	5	1.3		
<b>Driving fast in rain</b>					20.780a	<.001
- Never	60.2	39.8	256	68.1		
- Rarely	37.3	62.7	110	29.3		
- Often	14.3	85.7	7	1.9		
- Very often	33.3	66.7	3	.8		
<b>Traffic light ignored</b>					6.057	.109
- Never	57.5	42.5	226	60.1		
- Rarely	45.2	54.8	124	33.0		
- Often	42.9	57.1	21	5.6		
- Very often	40.0	60.0	5	1.3		
<b>Stop at Non Stop Area</b>						
<b>Stop in Non Stop Zone</b>					9.457a	.024
- Never	56.6	43.4	272	72.3		
- Rarely	43.6	56.4	94	25.0		
- Often	25.0	75.0	8	2.1		
- Very often	0.0	100.0	2	.5		
<b>Moved Broken Motorbike*</b>					3.085	.379
- Never	58.2	41.8	79	21.0		
- Rarely	58.3	41.7	60	16.0		
- Often	47.8	52.2	46	12.2		
- Very often			191	50.8		
<b>Picked up Friend at Non Stop Zone</b>					11.309a	.010
- Never	57.8	42.2	251	66.8		
- Rarely	43.3	56.7	104	27.7		
- Often	30.0	70.0	20	5.3		
- Very often	100.0	0.0	1	.3		
<b>Stop at Crowded Area</b>					5.332a	.149
- Never	54.3	45.7	256	68.1		
- Rarely	51.5	48.5	99	26.3		
- Often	25.0	75.0	16	4.3		
- Very often	60.0	40.0	5	1.3		
<b>Stop at Bus Stop Area</b>					1.001	.172
- Never	57.0	43.0	221	58.8		
- Rarely	45.0	55.0	120	31.9		
- Often	52.6	47.4	19	5.1		
- Very often	43.8	56.3	16	4.3		
<b>Violate Traffic Signal</b>						
<b>Speed up Yellow Light Signal</b>					6.909	.075
- Never	62.2	37.8	98	26.1		
- Rarely	49.8	50.2	205	54.5		
- Often	40.0	60.0	40	10.6		
- Very often	54.5	45.5	33	8.8		
<b>Slow Down at Yellow Signal *</b>					9.132	.028
- Never	60.5	39.5	38	10.1		
- Rarely	38.3	62.7	75	19.9		

	Driving After Drinking				$\chi^2$	p-value
	No	Yes	Total			
	%	%	n	%		
- Often	58.1	41.9	74	19.7	8.559	.036
- Very often	54.5	45.5	189	50.3		
<b>Followed Violating Vehicle</b>						
- Never	57.0	43.0	207	55.1	.950	.813
- Rarely	52.1	47.9	117	31.1		
- Often	32.4	67.6	34	9.0		
- Very often	38.9	61.1	18	4.8		
<b>Stop Before Stop Line*</b>						
- Never	53.3	46.7	90	23.9		
- Rarely	46.0	54.0	50	13.3		
- Often	52.9	47.1	51	13.6		
- Very often	53.5	46.5	185	49.2		

a: For Chi-square 20% cell count < 5

### F13 Relationship between License, Helmet Use and Road

#### Traffic Accidents

	Road Traffic Accidents				$\chi^2$	p-value
	No	Accidents	Total			
	accidents		n	%		
<b>License</b>	%	%	n	%	<b>.145</b>	<b>.695</b>
No	56.4	43.6	321	81.5		
Yes	58.9	41.1	73	18.5		
<b>Total</b>	<b>56.9</b>	<b>43.1</b>	<b>394</b>	<b>100</b>		
<b>Helmet use</b>					<b>.463</b>	<b>.921</b>
Never	57.1	42.9	219	55.6		
Rarely	55.2	44.8	125	31.7		
Often	62.5	37.5	24	6.1		
All the time	57.7	42.3	26	6.6		
<b>Total</b>	<b>56.9</b>	<b>43.1</b>	<b>394</b>	<b>100.0</b>		



**F14 Association between Accidents and Driving Style**

	<b>Accident</b>				$\chi^2$	p-value
	No	Yes	Total			
	%	%	n	%		
<b>Overtaking in the restricted zone</b>						
<b>Overtook other vehicles</b>					3.453	.327
- Never	69.6	30.4	23	5.8		
- Rarely	58.0	42.0	231	58.6		
- Often	49.4	50.6	79	20.1		
- Very often	57.4	42.6	61	15.5		
<b>Shifted lane to ahead</b>					2.394	.495
- Never	62.7	37.3	118	29.9		
- Rarely	54.5	45.5	191	48.5		
- Often	54.7	45.3	64	16.2		
- Very often	52.4	47.6	21	5.3		
<b>Overtook in heavy traffic</b>					.200	.978
- Never	57.7	42.3	163	41.4		
- Rarely	55.6	44.4	169	42.9		
- Often	57.5	42.5	40	10.2		
- Very often	59.1	4.09	22	55.6		
<b>Warned for overtaking</b>					4.490	.213
- Never	58.3	41.7	360	91.4		
- Rarely	41.9	58.1	31	7.9		
- Often	50.0	50.0	2	.5		
- Very often	0.0	100.0	1	.3		
<b>Fined for overtaking</b>					13..912a	.003
- Never	61.5	38.5	309	78.4		
- Rarely	36.1	63.9	61	15.5		
- Often	50.0	50.0	120	5.1		
- Very often	50.0	50.0	4	1.0		
<b>Had accidents overtaking</b>					35.663a	<.001
- Never	62.2	37.8	349	88.6		
- Rarely	15.4	84.6	39	9.9		
- Often	25.0	75.0	4	1.0		
- Very often	0.0	100.0	2	.5		
<b>Reckless driving behavior</b>						
<b>Driving on off thoughts</b>					14.430	.002
- Never	65.2	34.8	92	23.4		
- Rarely	59.8	40.2	219	55.6		
- Often	44.2	55.8	52	13.2		
- Very often	32.3	67.7	31	7.9		
<b>Driving fast when friend ask</b>					8.265a	.041
- Never	61.3	38.7	274	69.5		
- Rarely	48.1	51.9	108	27.4		
- Often	33.3	66.7	9	2.3		
- Very often	33.3	66.7	3	.8		
<b>Turned to friend</b>					10.560a	.014
- Never	61.9	38.1	247	62.7		
- Rarely	51.2	48.8	129	32.7		
- Often	30.0	70.0	10	2.5		
- Very often	25.0	75.0	8	2.0		

					<b>Accident</b>	
<b>Driving for show skill</b>					6.334a	.096
- Never	59.7	40.3	318	80.7		
- Rarely	42.6	57.4	61	15.5		
- Often	50.0	50.0	10	2.5		
- Very often	60.0	40.0	5	1.3		
<b>Driving fast in rain</b>					3.376a	.337
- Never	58.9	41.1	270	68.5		
- Rarely	53.5	46.5	114	28.9		
- Often	28.6	71.4	7	1.8		
- Very often	66.7	33.3	3	.8		
<b>Traffic light ignored</b>					1.451	.694
- Never	58.8	41.2	243	61.7		
- Rarely	54.4	45.6	125	31.7		
- Often	47.6	52.4	21	5.3		
- Very often	60.0	40.0	5	1.3		
<b>Stop at non stop area</b>						
<b>Stop in non stop zone</b>					2.466a	.482
- Never	58.9	41.1	287	72.8		
- Rarely	52.6	47.4	97	24.6		
- Often	37.5	62.5	8	2.0		
- Very often	50.0	50.0	2	.5		
<b>Moved broken motorbike*</b>					2.719	.437
- Never	61.9	38.1	84	21.3		
- Rarely	56.3	43.8	64	16.2		
- Often	63.3	36.7	49	12.4		
- Very often	53.3	46.7	197	50.0		
<b>Picked up friend at non stop zone</b>					1.115a	.774
- Never	58.6	41.4	263	66.9		
- Rarely	54.2	45.8	107	27.2		
- Often	50.0	50.0	20	5.1		
- Very often	66.7	33.3	3	.8		
<b>Stop at crowded area</b>					3.087a	.378
- Never	59.6	40.4	270	68.5		
- Rarely	52.0	48.0	102	25.9		
- Often	47.1	52.9	17	4.3		
- Very often	40.0	60.0	5	1.3		
<b>Stop at bus stop area</b>					.315	.957
- Never	56.8	43.2	234	59.4		
- Rarely	55.7	44.3	122	31.0		
- Often	59.1	40.9	22	5.6		
- Very often	62.5	37.5	16	4.1		
<b>Violate traffic signal</b>						
<b>Speed up yellow light signal</b>					10.918	.012
- Never	69.4	30.6	108	27.4		
- Rarely	54.0	46.0	211	53.6		
- Often	45.2	54.8	42	10.7		
- Very often	48.5	51.5	33	8.4		
<b>Slow down at yellow signal *</b>					11.417	.009
- Never	64.1	35.9	39	9.9		
- Rarely	40.3	59.7	77	19.5		
- Often	57.0	43.0	79	20.1		

		<b>Accident</b>				
- Very often	61.8	38.2	199	50.5		
<b>Followed violating vehicle</b>					10.645	.014
- Never	60.6	39.4	221	56.1		
- Rarely	56.7	43.3	120	30.5		
- Often	31.4	68.6	35	8.9		
- Very often	61.1	38.9	18	4.6		
<b>Stop before stop line*</b>					1.942	.584
- Never	50.5	49.5	91	23.1		
- Rarely	58.8	41.2	51	12.9		
- Often	59.6	40.4	57	14.5		
- Very often	58.5	41.5	195	49.5		

a: For Chi-square 20% cell count < 5



## Biography

- Name : Ketsomsouk Bouphavanh
- Date of birth : 5<sup>th</sup> May 1960
- Residential address : Unit 2, Sikhaythong village, Sikhottabong District,  
Vientiane Municipality, Lao PDR.  
Phone: Home: 856-21 (512065)
- Official address : Faculty of Medical Sciences, National University of  
Laos.  
P.O. Box: 7444 Samsenthai Road, Vientiane  
Municipality, Phone: 856-21 (214033)
- Professional qualification : MD (Medical Doctor)
- Designation : Deputy Director
- 1997 till date : Deputy Head of Academic Affairs Department of  
Faculty of Medical Sciences, National University of  
Laos.
- 1992-1996 : Deputy Head of Academic Affairs, University of Health  
Sciences, and Laos.
- 1990-1992 : Deputy Director of Provincial Hospital, Khammouane  
Province, Laos.
- 1989-1990 : Head of Surgical Department of Provincial Hospital,  
Khammouane Province, Laos.