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ASIAN TRANSPORTATION RESEARCH SOCIETY

Risk Behavioral and Cause Affecting of Illegal Racing Motorcyclist in Khon Kaen, Thailand

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CHAPTER I INTRODUCTION

1.1 Rationale

Traffic accidents are a serious problem in Thailand in every province. This leads to public health, economic and social problems. The number of people are killed on road traffic accident each year approximately to 13,000 while the number of injured could be as 1 million, more than 90% of traffic accident found in developing countries. (WHO,2010). Major group is youth during 5-29 years old, Southeast Asia would be predicted most serious of traffic accident problem in the year 2020.

Although the government try to motivate and campaign for decreasing this outstanding problem but it still high risk . Traffic accident is the 3rd cause of dead in each group age of Thailand. The statistics of mortality in the year 2003-2009 was subsequently decline 22.26, 22.02, 20.23, 20.27, 19.85, 18.30 and 16.89 per 100,000 and most cause is motorcyclist. (Royal Thai Police , 2010)

According to the road traffic accident report of the Royal Thai Police, most of the accidents involve motorcycles, the proportion had a rising trend of 50.7% in 1998 to 62.0% in 2009. That is consistent with the report of the Land Transport Department which reveals that the number of registered motorcycles has risen threefold from 534,458 units in 1998 to 1,635,807 units in 2009. An analysis of motorcycle riding accidents conducted by the Bureau of Epidemiology of the MoPHc‿s Disease Control Department revealed that more than 40% of seriously injured cases had drunk alcohol before riding a motorcycle (Ministry of Public Health,2010)

Illegal Racing Motorcyclist not only make annoy and suffering but make unsafe for other people also. In addition Illegal Racing Motorcyclist is the subsequently to many problem among youth such as drug abuse gambling, premature sexual intercourse , violence, and lack of opportunity about education. Therefore the government has to increase concern strong family, community, and education system.
(Patchrin Sirivisuthirat, and Panadda Chumnansouk, 2007

Khon Kaen is the center city of Northeast, Thailand and increasing all infrastructures including transportation system ,socioeconomic , including urbanization, these challenge to the youth access risk activities especially illegal racing motorcyclist by decoration their motorbike and setting a group of racing approximately 8-9 until 100 per group of motorcyclist. They are 3 majors

groups illegal racing motorcyclist in Muang district, Khon Kaen now, most of them race every long weekend . These made traffic accident both for themselves and another passenger on the road including increasing disturb other people also. Including policeman work hard, annoy people those areas and non quality of light, cannot sleeping, accident of passengers on the road were effect, father and mother suffer from their children , learning process was drop out, risk of road accident, disability and dead social problem, gambling violence, premature sexual intercourse.

Therefore researchers concern to important and severe problem would like to study behavioral and cause affecting of illegal racing motorcyclist in Khon Kaen, Thailand for finding the guideline to problem solving about this problem and increasing good quality of life of the people.

1.2. Research Question

What are risk behavioral and cause affecting of illegal racing motorcyclist in Khon Kaen, Thailand. ?

1.3.Research Objectives

1.Determine Risk Behavior of Illegal Racing Motorcyclist
2.Determine Cause Affecting of Illegal Racing Motorcyclist
3.Determine Guideline for problem solving of Illegal Racing Motorcyclist.

1.4. Limitation

This research study in only 1Province, Khon Kaen, Thailand..

1.5. Research Useful.

1. Know behavior of illegal racing motorcyclist
2. Know factor affecting illegal racing motorcyclist (Predisposing ,enabling and reinforcing factor)
3. know cause of illegal racing motorcyclist
4. guideline for prevention and alleviation of illegal racing motorcyclist
5. Decreasing illegal racing motorcyclist in community and increasing social well being.

1.6. Definition of terms

Risk Behavior : are those opinion and activity expose people to harm, or dangerous.

Illegal Racing Motorcyclist : motorcyclist are racing in public area and interrupt other by high speed and sound all are illegal.

CHAPTER 2 METHODOLOGY

This research specific focus on illegal racing motorcyclist, consequently related research literature was reviewed in the following topics.

2.1 Road traffic accident situation in the world
2.2 Road traffic accident situation in Thailand
2.3 PRECEED Model
2.4 Previous Research
2.5 Conceptual framework

2.1 Road traffic accident situation in the world.

Road traffic accident is an increasing to the major causes of global population injuries and deaths, and has been as a majority global health problem. Estimated almost 1.2 million killed on road crashes while the number injured were high as 50 million (WHO, 2004)..

More than 1.2 million die and as many as 50 million are injured every year in Road Traffic Injuries (RTIs). The overwhelming majority of these deaths occur in low and middle-income countries (LMICs) and 40% in the four BRIC countries alone. Recent trends suggest this gap is increasing. In the past fifteen years, RTIs have increased by almost 80% in Asia and by 40% in Latin America and Africa. The opposite is true in high-income countries, however, where RTI rates have been on a path of steady decline over several decades.

Beyond the enormous personal suffering they cause, RTIs weaken economic growth, place a huge strain on health care systems, and challenge development objectives. Across LMICs, losses due to RTIs are estimated at USD 100 billion/year, a figure which incorporates immediate direct costs, such as hospital care admissions, and longer term human capital costs associated with RTI victims no longer being able to take part in economic production processes. At national level, this aggregate translates into losses of 1-3% of GDP, a figure comparable to what LMICs receive in development assistance (world Bank,213)

On 11 May 2011, the Decade of Action for Road Safety 2011-2020 was launched in more than 100 countries, with one goal: to prevent five million road traffic deaths globally by 2020. Moving from the Global Plan for the Decade to national action, many countries have taken measures towards improving road safety, either by developing national plans for the Decade; introducing new laws; or increasing

enforcement of existing legislation, among other concrete actions. The recent UN General Assembly resolution on global road safety sponsored by more than 80 countries gives further impetus to the Decade by calling on countries to implement road safety activities in each of the five pillars of the Global Plan. (world Bank,213)

2.2 Road Traffic Accidents in Thailand.

The situation of road traffic accidents in Thailand can be categorized by the time period as follows: **The First Period, before 1986: Economic Recession**. The number of accidents was not so high during this period. Each year, there were about 18,000-25,000 accidents with about 2,000-4,000 deaths or a mortality rate of 3.9-5.7 per 100,000 population. And there were approximately 8,000-9,000 injury cases each year, or an injury rate of 17.2 per 100,000 population.

The Second Period, 1987-1992: Economic Recovery. During this period there were about 40,000-60,000 accidents each year, nearly two times higher than during the previous period, with about 8,000-9,000 deaths or a mortality rate of 7.4-16.0 per 100,000 population. It was noteworthy that casualties increased almost threefold and the number of injuries increased to 20,000-25,000 each year or an injury rate of 24.0-43.9 per 100,000 population, an approximately twofold rise.

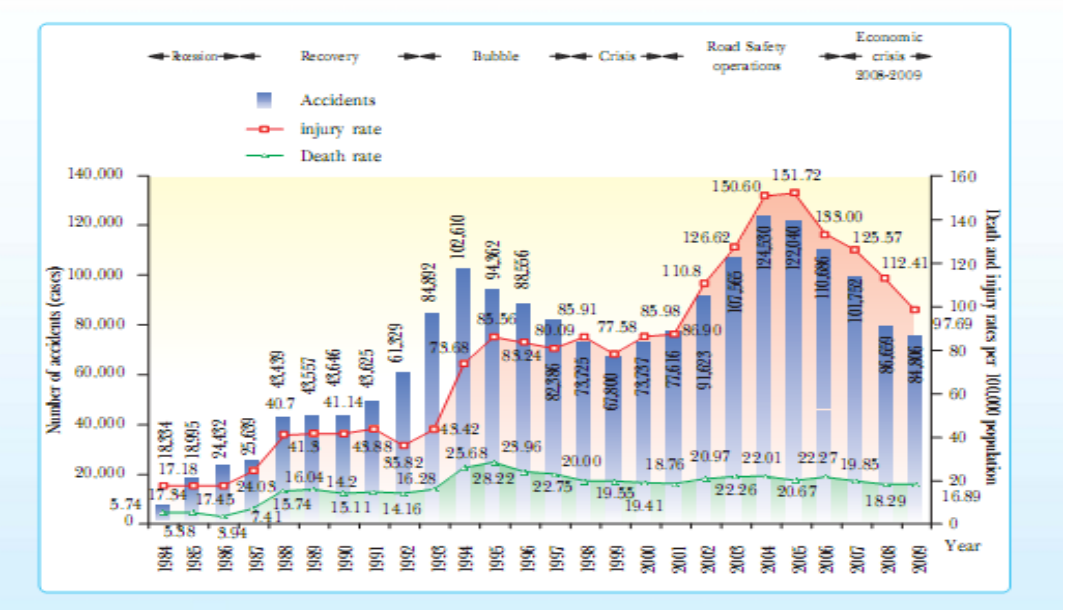
The Third Period, 1993›1996: Bubble Economy. Each year there were 80,000-100,000 accidents, a twofold increase, with about 14,000-16,000 deaths or a mortality rate of 16.3-28.2 per 100,000 population, a nearly twofold increase. And there were about 40,000-50,000 injuries each year or an injury rate of 43.4-85.6 per 100,000 population, an approximately twofold increase.

The Fourth Period, 1997-2001: Economic Crisis. The number of accidents dropped to 70,000-80,000 each year with around 12,000 deaths or a mortality rate of 20.0›22.7 per 100,000 population. And each year there were 48,000›52,000 injuries or an injury rate of 77.5›86.9 per 100,000 population. This was a declining trend compared with the previous period.

The Fifth Period, 2002 onwards: Economic Recovery and Road Safety Operations. Each year there were approximately 90,000-125,000 accidents with 12,000-14,000 deaths or a mortality rate of 19-22.26 per 100,000 population. And there were approximately 60,000-95,000 injuries a year or an injury rate of 110.8-151.72 per 100,000 population.

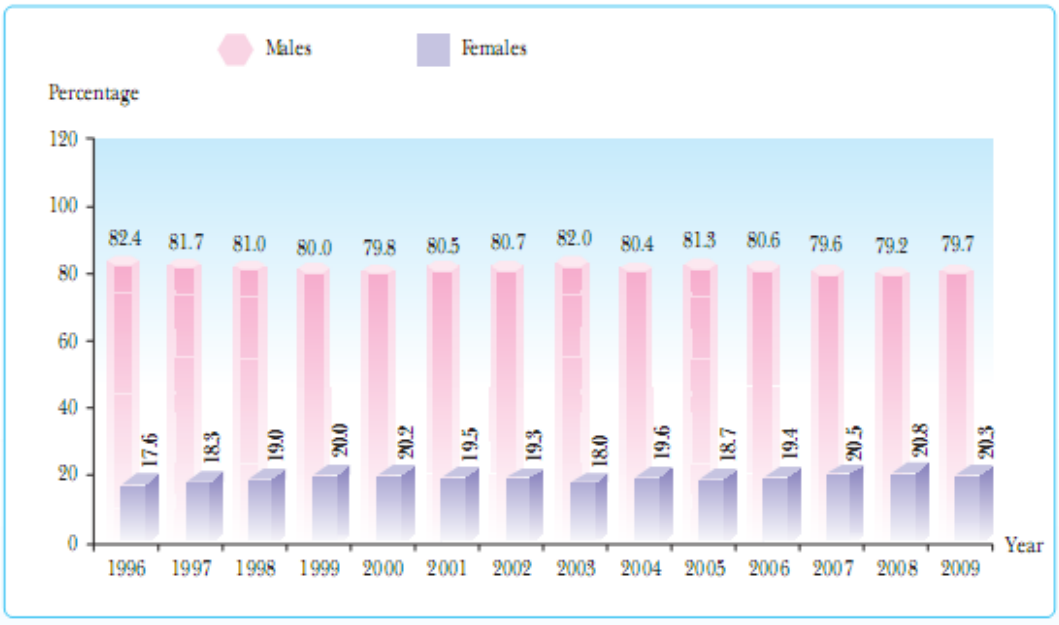
After the implementation of the road safety program, the number of road accidents has dropped to 85,000›90,000 with about 10,000-11,000 deaths per year, or a mortality rate of 17-18 per 100,000 population. And each year there are about 60,000-70,000 injuries or an injury rate of 98›112.41 per 100,000 population (Figure 2.1)

Figure 2.1 Dead and injury rate from road traffic accidents, Thailand 1984-2009



It has been found that the largest proportion of road accident-related deaths occur in the working-age group (15›34 years), 4-5 times higher in males than in females (Figure 2.2).

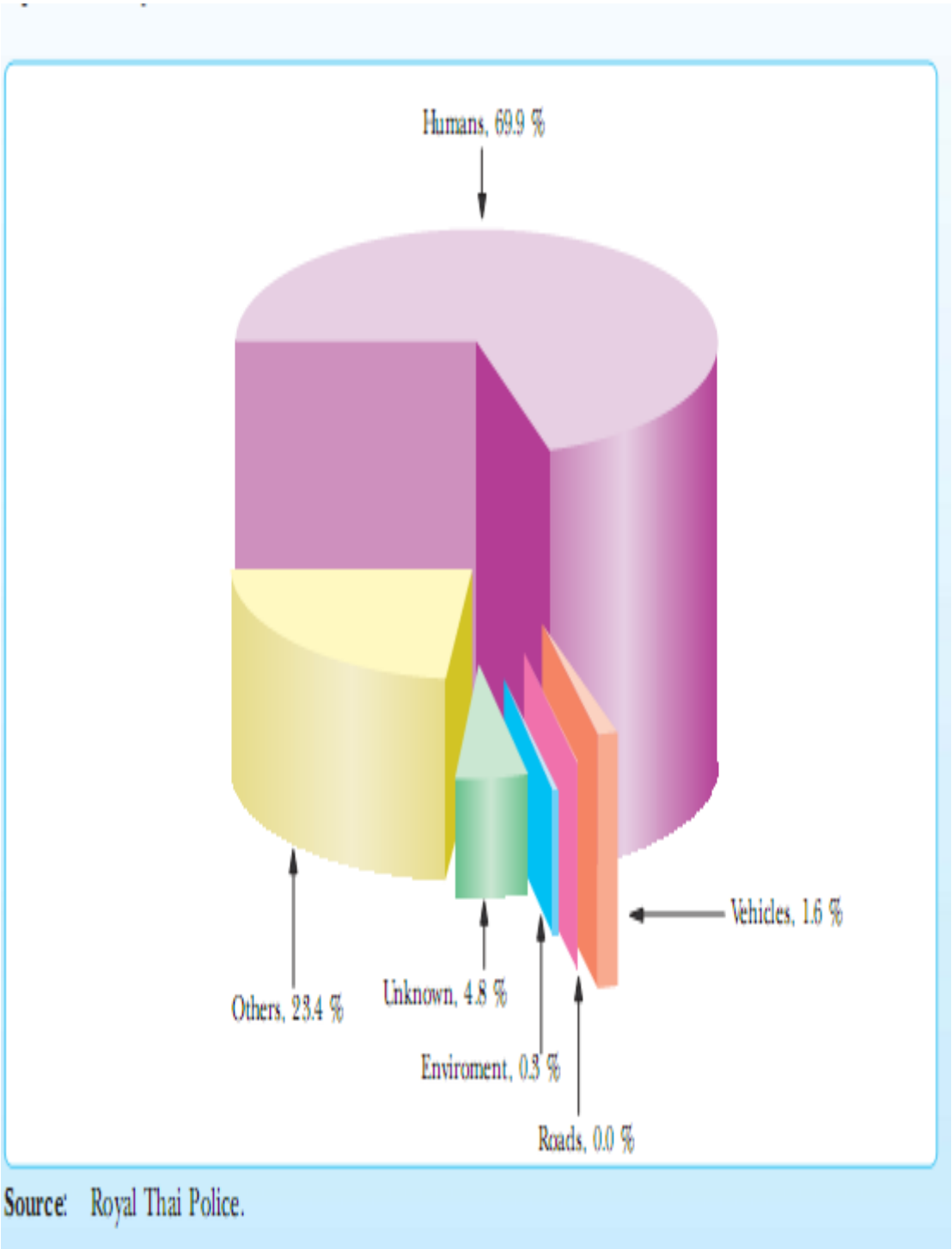
Figure 2.2 Proportion of dead from road traffic accident by sex 1996-2009



Source: Bureau of Policy and Strategy, Office of the Permanent Secretary, MoPH.

Primarily, traffic accidents are mostly caused by humans (69.9%) and a small proportion by the vehicles and environment (1.6% and 0.3%, respectively, (Figure 2.3

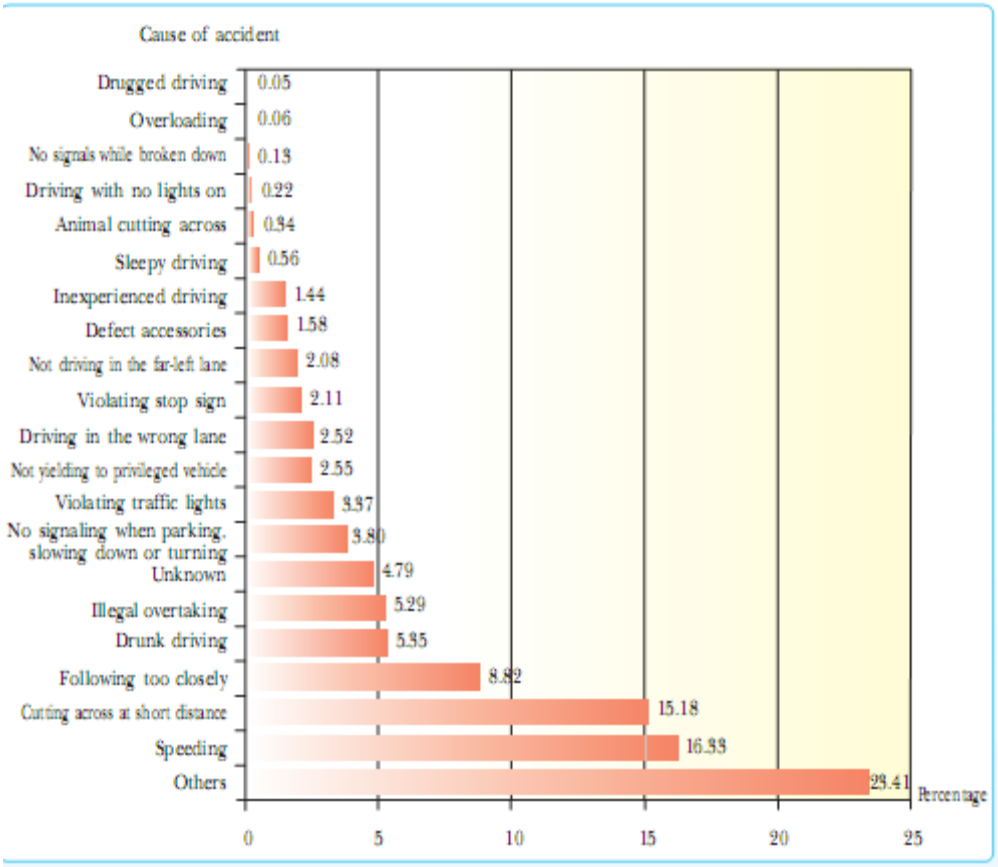
Figure 2.3 Major causes of road traffic accident, 2009



Source: Royal Thai Police.

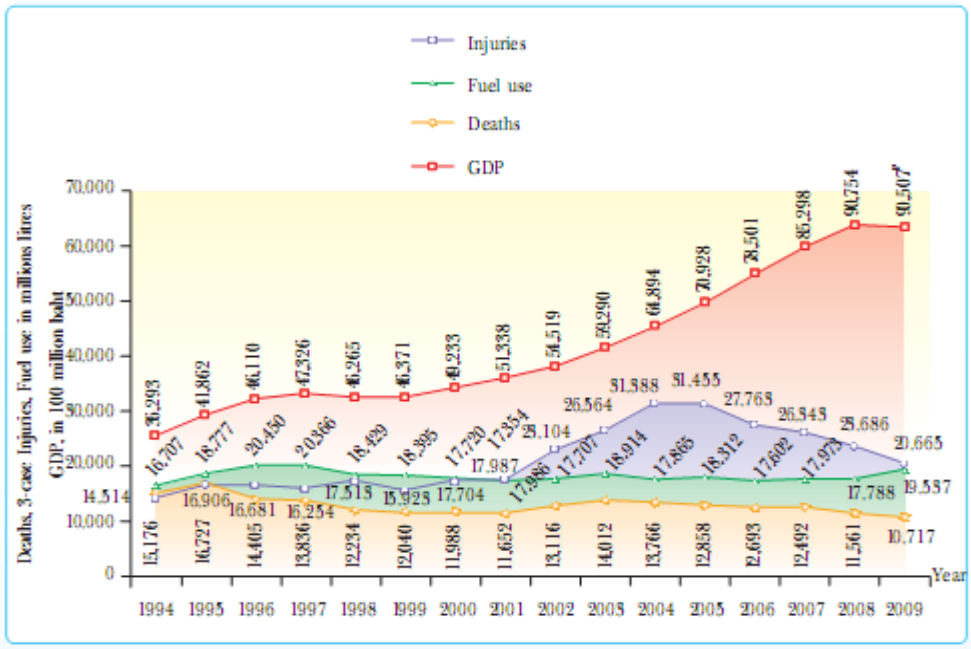
By category of road traffic accidents, the most commonly found category is speeding (16.3%), followed by cutting across the path of another vehicle in short distance, following another vehicle too closely and drunk driving (Figure 2.4)

Figure 2.4 Causes of road traffic accident by traffic police charge 2009



Source: Royal Thai Police.

Figure 2.5 Trends in GDP growth fuel use for transportation, injuries and deaths from road traffic accident. 1996-2009



Sources
1. Yordphol Tanaboriboon el al. Situation of Road Traffic Accidents in Thailand, 2006.
2. Police Information Centre, Royal Thai Police.
3. Department of Alternative Energy Development and Efficiency, Ministry of Energy
4. Office of the National Economic and Social Development Board.

According to the road traffic accident report of the Royal Thai Police, most of the accidents involve motorcycles, the proportion had a rising trend of 50.7% in 1998 to 62.0% in 2009. That is consistent with the report of the Land Transport Department which reveals that the number of registered motorcycles has risen threefold from 534,458 units in 1998 to 1,635,807 units in 2009. An analysis of motorcycle riding accidents conducted by the Bureau of Epidemiology of the MoPHcs Disease Control Department revealed that more than 40% of seriously injured cases had drunk alcohol before riding a motorcycle (Figure 2.6).

Figure 2.6 Number of road traffic accident and motorcycle and proportion of seriously injure drinking motorcyclist 1991-2009

Year	Number of road traffic accidents (cases)	Motorcycle accident charges (cases)	Proportion of motorcycle accidents (percent)	No. of registered motorcycles (units)	Proportion of seriously injured drinking motorcy-clists (percent)
1991	48,625	-	-	698,241	-
1992	61,329	-	-	715,877	-
1993	84,892	-	-	859,176	-
1994	102,610	-	-	1,091,216	-
1995	94,362	-	-	1,389,076	-
1996	88,556	-	-	1,247,906	-
1997	82,386	-	-	988,472	-
1998	78,725	37,414	50.7	584,458	-
1999	67,800	34,948	51.5	497,422	-
2000	73,737	37,498	50.8	682,929	-
2001	77,616	41,215	53.1	849,907	-
2002	91,628	53,732	58.6	1,186,957	48.7
2003	107,565	66,110	61.5	1,643,179	49.4
2004	124,580	77,642	62.3	1,943,590	48.6
2005	122,040	78,880	64.6	2,011,816	46.5
2006	110,686	75,752	68.4	2,001,711	44.4
2007	101,752	68,140	67.0	1,665,400	44.0
2008	88,689	59,162	66.7	1,796,376	41.7
2009	84,806	52,608	62.0	1,685,807	-

Sources: 1. Police Information Centre, Royal Thai Police.
2. Land Transport Department, Ministry of Transport.
3. Bureau of Epidemiology, Department of Disease Control, MoPH.

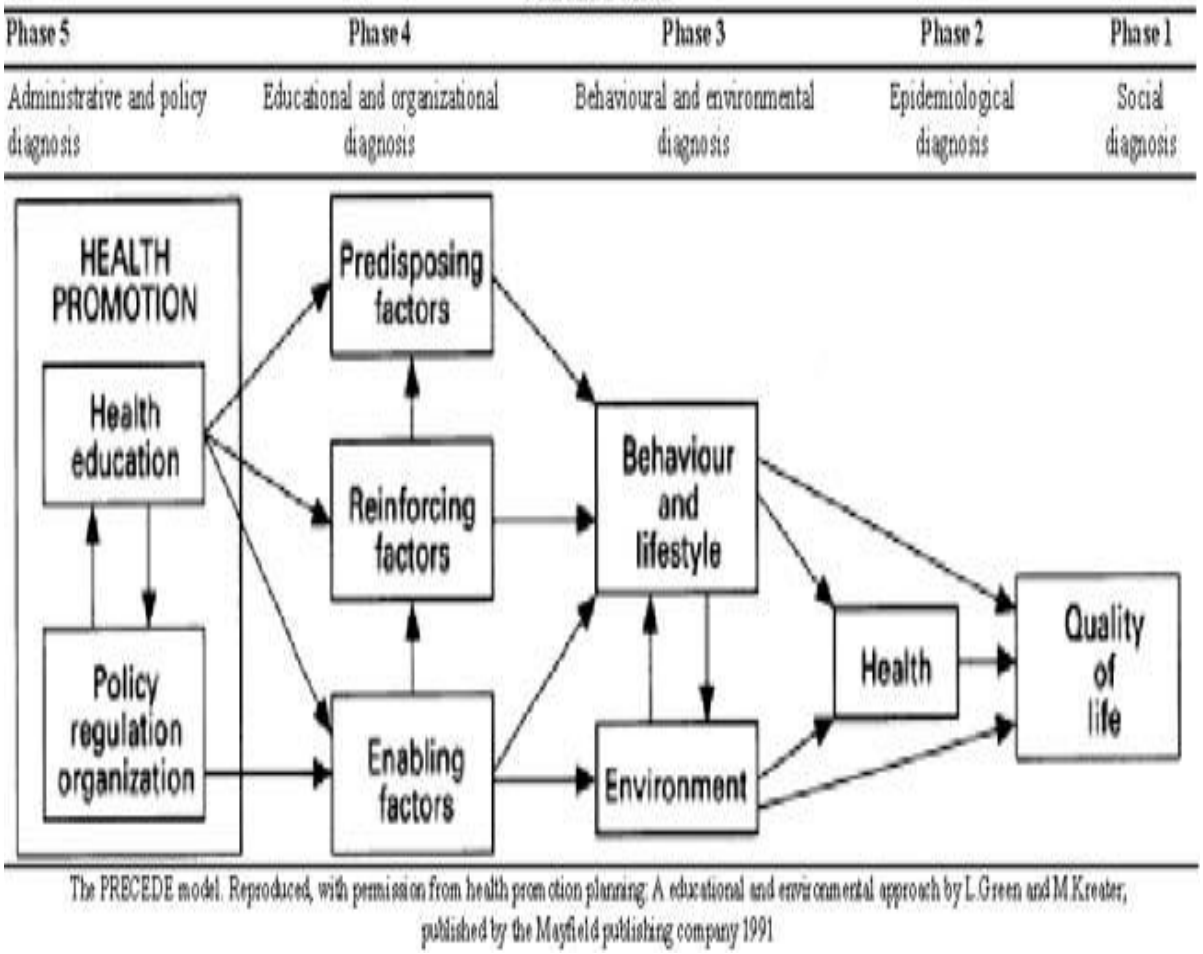
Even though the royal decree on safety or crash helmets has been enforced in all provinces throughout the country since 1 January 1996, the data from the injury surveillance system have shown that motorcycle riders/passengers who do not wear helmets as well as motor vehicle drivers/passengers who do not use safety belts are 80% more likely to have serious injuries from traffic accidents than those who do so and nearly half of those motorcycle accident victims with severe injuries have drunk alcohol before riding

Therefore Traffic accident is still serious problem in Thailand both rural and urban area. Youth who are motorcyclist especially illegal racing motorcyclist are mostly risk group of traffic accident.

2,3 PRECEED Model

The PRECEDE framework was first developed and introduced in the 1970s by Green and colleagues, PRECEDE is based on the premise that, just as a medical diagnosis precedes a treatment plan, an educational diagnosis of the problem is very essential before developing and implementing the intervention plan. **Predisposing** factors include knowledge, attitudes, beliefs, personal preferences, existing skills, and self-efficacy towards the desired behavior change. **Reinforcing** factors include factors that reward or reinforce the desired behavior change, including social support, economic rewards, and changing social norms. **Enabling** factors are skills or physical factors such as availability and accessibility of resources, or services that facilitate achievement of motivation to change behavior.(http://en.wikipedia.org/wiki/PRECEDE-PROCEED, 2013) (Figure 7,8).

Figure 2.7 PRECEED Model (Source : https://www.google.co.th/search, 2013)



The PRECEDE model. Reproduced, with permission from health promotion planning: A educational and environmental approach by L.Green and M.Kreuter, published by the Mayfield publishing company 1991

Component of PRECEDE PROCEED Model.

The Precede proceed planning model consists of four planning phases, one implementation phase, and 3 evaluation phases.

PHASE 1 - SOCIAL DIAGNOSIS

The first stage in the program planning phase deals with identifying and evaluating the social problems that have an impact on the quality of life of a population of interest. Social assessment is the "application, through broad participation, of multiple sources of information, both objective and subjective, designed to expand the mutual understanding of people regarding their aspirations for the common good". During this stage, the program planners try to gain an understanding of the social problems that affects the quality of life of the

community and its members, their strengths, weaknesses, and resources; and their readiness to change. This is done through various activities such as developing a planning committee, holding community forums, and conducting focus groups, surveys, and/or interviews. These activities will engage the audience in the planning process and the planners will be able to see the issues just as the community sees those problems.

PHASE 2 – EPIDEMIOLOGICAL, BEHAVIORAL, AND ENVIRONMENTAL DIAGNOSIS

Epidemiological diagnosis – Epidemiological assessment deals with determining and focusing on specific health issue(s) of the community, and the behavioral and environmental factors related to prioritized health needs of the community. Based on these priorities, achievable program goals and objectives for the program being developed are then established. Epidemiological assessment may include secondary data analysis or original data collection. Examples of epidemiological data include vital statistics, state and national health surveys, medical and administrative records etc. Genetic factors, although not directly changeable through a health promotion program, are becoming increasingly important in understanding health problems and counseling people with genetic risks, or may be useful in identifying high-risk groups for intervention.

Behavioral diagnosis – This is the analysis of behavioral links to the goals or problems that are identified in the social or epidemiological diagnosis. The behavioral ascertainment of a health issue is understood firstly through those behaviors that exemplify the severity of the disease (e.g. tobacco use among teenagers). Secondly, through the behavior of the individuals who directly affect the individual at risk - for example parents of the teenagers who keep cigarettes at home. Thirdly, through the actions of the decision-makers that affects the environment of the individuals at risk, such as law enforcement actions that restrict the teen's access to cigarettes. Once behavioral diagnosis is completed for each health problem identified, the planner is able to develop more specific and effective interventions.

Environmental diagnosis – This is a parallel analysis of social and physical environmental factors other than specific actions that could be linked to behaviors. In this assessment, environmental factors beyond the control of the individual are modified to influence the health outcome. For example, poor nutritional status among school children may be due to the availability of unhealthful foods in school. This may require not only educational interventions, but also additional strategies such as influencing the behaviors of the school's food service managers.

Phase 3 - EDUCATIONAL AND ECOLOGICAL DIAGNOSIS

Once the behavioral and environmental factors are identified and interventions are selected, planners can start to work on selecting factors that if modified will be

most likely to result in behavior change, and can sustain this change process. These factors are classified as predisposing factors, enabling factors, and reinforcing factors. Predisposing factors are any characteristics of a person or population that motivates behavior prior to or during the occurrence of that behavior. They include an individual's knowledge, beliefs, values, and attitudes.

Enabling factors are those characteristics of the environment that facilitate action and any skill or resource required to attain specific behavior. They include programs, services, availability and accessibility of resources, or new skills required to enable behavior change.

Reinforcing factors are rewards or punishments following or anticipated as a consequence of a behavior. They serve to strengthen the motivation for behavior. Some of the reinforcing factors include social support, peer support, etc.

Phase 4 - ADMINISTRATIVE AND POLICY DIAGNOSIS
This phase focuses on the administrative and organizational concerns, which must be addressed prior to program implementation. This includes assessment of resources, development and allocation of budget, looking at organizational barriers, and coordination of the program with all other departments, including external organizations and the community. These are detailed further in Green & Ottoson.

Administrative Diagnosis assess policies, resources, circumstances, prevailing organizational situations that could hinder or facilitate the development of the health program.

Policy Diagnosis assesses the compatibility of the program goals and objectives with those of the organization and its administration. This evaluates whether the program goals fit into the mission statements, rules and regulations that are needed for the implementation and sustainability of the program.

Phase 5 - IMPLEMENTATION OF THE PROGRAM

Phase 6 - PROCESS EVALUATION is used to evaluate the process by which the program is being implemented. This phase determines whether the program being implemented according to the protocol, and determines whether the objectives of the program are being met. It also helps identify modifications that may be needed to improve the program.

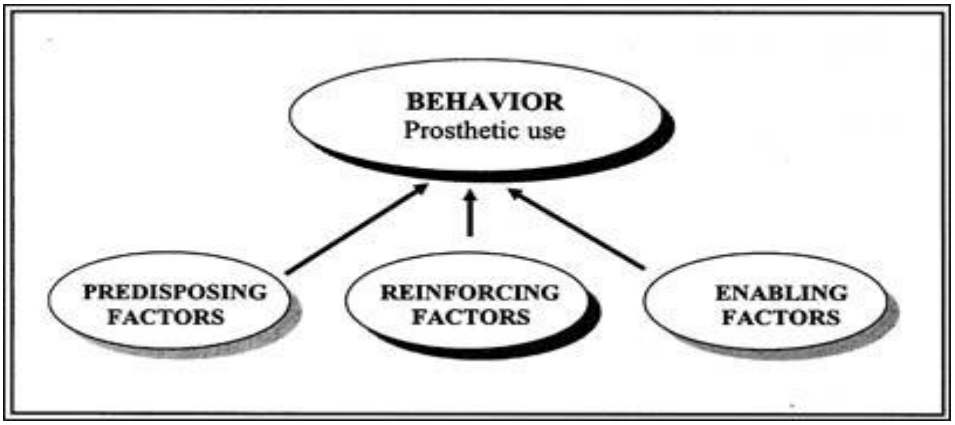
Phase 7 - IMPACT EVALUATION measures the effectiveness of the program with regards to the intermediate objectives as well as the

changes in predisposing, enabling, and reinforcing factors. Often this phase is used to evaluate the performance of educators.

Phase 8 - OUTCOME EVALUATION measures change in terms of overall objectives and changes in health and social benefits or the quality of life. That is, it determines the effect the program had in the health and quality of life of the community.

This research applied only PRECEDE model for guiding of data collection including predisposing, enabling and reinforcing factor as figure 8

Figure 2.8 PRECEED Model, Focus on 3 Components
(Source : https://www.google.co.th/search, 2013)



2.4 Previous Study

Hawabibi Laher , Lu-Anne Swart , Mohamed Seedat And Safy Mendes Novelo (2009). the identification of " At-Risk" groups for transport relates fatalities across four South African cities

South Africa's road traffic death rate of 11.7 per 100 000 per 100 million kilometres travelled is the fifth highest in the world. The paper accordingly attempted to identify 'at-risk' groups for transport related fatalities (2001-2004) across four South African cities, namely Johannesburg; Cape Town; Durban and Pretoria, cities where the National Injury Mortality Surveillance System (NIMSS) has full coverage. Using NIMSS data these at risk groups were analysed for sex, race, age, elevated blood alcohol levels, day of the week and time of day. Age standardised rates were also calculated for traffic-fatalities across the cities. Consistent with studies conducted elsewhere (Harruf, Averry and Alter-Pandy,1998)our results indicated that pedestrians were the group most'at-

risk'(45.94%),followedby unspecified, drivers, passengers, motorcyclists/bicyclists and train commuters. In most instances fatalities peaked over weekends across all road user types. Malesparticularly Black African males were at greater risk than females. With the exception of motorcyclists where 20-29 year olds were at the greatest risk, the 30-39 age group was most at risk across all road user types. Elevated blood alcohol levels were also noted for males between the ages of 30-39 across all road user types. Our results concur with international traffic fatality trends in that they point to the particular vulnerability of pedestrians and indicate the need for integrated road safety programming. Safety measures need to give particular consideration to the traffic fatality-alcohol abuse nexus.

Only 46,4 % passed the initial test (52,8 % among medical doctors, 40,5 % among nurses and 34,4 % among other professions). After the training plan, the amount of people who passed the final test increased to 94,8 %. The training plan was profitable because the knowledge on road traffic injuries prevention in specialists from different community sectors and disciplines was highly and rapidly increased, in order to spread the acquired knowledge in their action areas.

Francesco Zambon, Marie Hasselberg**. (2006)**. Study the socioeconomic differences and motorcycle injuries: Age at risk and injury severity among young drivers A Swedish nationwide cohort study. Study o*bjective:* The study examines whether there are socioeconomic differences among young motorcycle drivers (aged 16–25) involved in road-traffic injuries with regard to age and injury severity. *Design:* Nationwide retrospective register-based cohort study. *Setting and participants:* Subjects born in 1970–1972 were extracted from the Swedish Population and Housing Census of 1985 (*n* = 334 070).
Individual records from the 1985 census were linked to police-reported data and hospital-based data for the period 1988–1995 on the basis of a search for each subject's first registered road-traffic injury as a motorcycle driver (*n* = 2034). Information on household socioeconomic group was taken from the Swedish census of 1985. Two categories of crash severity were analysed (minor injury and severe/fatal injury), based on assessments of the police and according to length of hospitalization.
Main results: Incidence of motorcycle injury varies considerably according to age of driver, reaching a peak at the age of 17. The greatest differences in injury risk between socioeconomic groups are present when their members are aged 17–19. At the age of 18, subjects belonging to
low socioeconomic positions run a risk of injury occurrence 2.5 times higher than those belonging to the highest socioeconomic category. Young drivers in lower socioeconomic groups have higher odds for both minor and severe injuries than their counterparts in the highest socioeconomic group, but there is no further increase for the latter.

Conclusions: The study demonstrates howcrucial the first years of driving are in relation to injury, and howwide the gap is in terms of socioeconomic differences at these ages, suggesting that this is the most appropriate time for intervention.

Fereshteh Zamani-Alavijeh, M. Bazargan, A. Shafiei, Shahrzad Bazargan-Hejazi **(2011)**. The frequency and predictors of helmet use among Iranian motorcyclists: A quantitative and qualitative study. This study examines the rate of helmet use and identifies barriers and facilitators of wearing helmets among Iranian motorcyclists. A mixed-method approach was used, including a structured seasonal survey with specific observations of a random sample of 6010 riders and qualitative methods thatincluded 29 in-depth interviews and seven focus groups (n = 31).Results: Only 10% of motorcyclists wear a standard helmet while riding. However, another 23% of motorcyclists used non-standard or partial helmets that covered only part of the head and do not prevent head trauma injuries effectively. We observed only 2 of 264 child passengers and 22 of 1951 adult passengers wearing helmets. Almost no one used protective pants or clothing made to be more visible in traffic. Themes emerged from qualitative interviews and were grouped into three main categories: (1) helmet characteristics; (2) social and cultural factors; and (3) personal and psychological factors. Conclusion: Overall, the motorcyclists in our study believed that wearing a safety helmet protects them against serious injuries or death during a crash; however, only a small percentage of the motorcyclists used safety helmets. National intervention programs addressing motorcycle safety should aim to overcome barriers to and promote facilitators of helmet use, including providing inexpensive standard helmets, banning manufacturing/using unsafe partial or dummy helmets, as well as enforcing helmet use on a consistent basis.

Michael D. Kealla, Stuart Newstead **(2012)**.Study Analysis of factors that increase motorcycle rider risk compared to car driver risk.
As in other parts of the Western world, there is concern in New Zealand about increasing popularity of motorcycles because of potential increases in road trauma. This study sought to identify important factors associated with increased risk for motorcyclists to inform potential policy approaches to reduce motorcyclist injury, such as changes to motorcyclist licensing, training and education. Using data extracted from a register of all New Zealand licensed motor vehicles that were matched to crash data, statistical models were fitted to examine patterns of motorcycle risk in comparison with small cars. These showed generally elevated risks for motorcyclists compared to cars, but particularly elevated risks for motorcycle owners aged in their 20s or who lived in more urbanised settings. In crashes, motorcyclists have little protection from injury, putting the motorcyclist at high risk of injury. When comparing new motorcycles with new cars, the odds

of fatal or serious injury to a motorcycle rider involved in an injury crash were almost eight times the odds for a car driver.

Torkel BjØrnskau , Tor-Olav Naevestad, Juned Akhtar.**(2012)**.
Traffic safety among motorcyclists in Norway: A study of subgroups and risk factors. Although it is widely recognized that motorcyclists have a particularly high accident risk, our knowledge of the mechanisms producing this accident risk is incomplete. The aims of the present paper are to identify subgroups of motorcyclists with a particularly high accident risk and to identify the relevant risk factors at work. The study presented in this paper relies both on a questionnaire (N = 3356) relating rider characteristics, behaviors and accident risk, and analyses of fatal motorcycle accidents (ca. 100) from 2005 to 2008 in Norway. The results reveal that riders of racing replica bikes (sport bikes), and riders younger than 19 years, including especially youths (16–17 years) riding light motorcycles ($\leq$125 cm^3), are subgroups of Norwegian motorcyclists with particularly high accident risks. Analysis of fatal motorcycle accidents reveals that about half of the fatal accidents involve sport bikes. Nearly all fatal accidents with sport bikes involved excessive speed. The combination of low age, low experience, risky behavior and "unsafe" attitudes seems to be a particular potent risk factor for Norwegian motorcyclists.

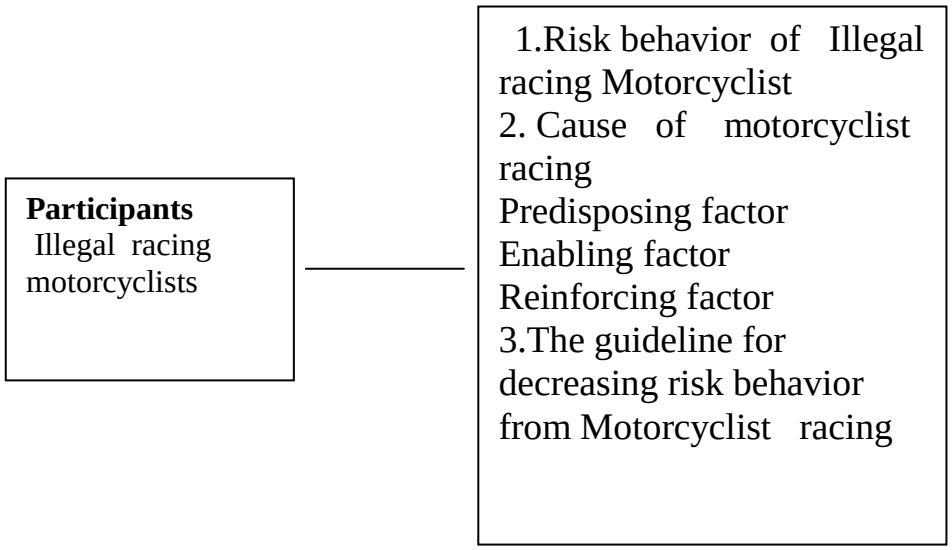
Soyoung Jung, Qin Xiao Yoonjin Yoon (2013). Study evaluation of motorcycle safety strategies using the severity of injuries . As know that The growth of motorcycle fatalities in California has been especially prominent, specifically with regard to the 24 and under age group and those aged 45–54. This research quantitatively examined factors associated with motorcyclist fatalities and assessed strategies that could improve motorcyclist safety,
specifically focusing on the two age groups mentioned above. Severity of injury was estimated separately for both age groups with multinomial logit models and pseudo-elasticity using motorcycle-related collision data that was collected between 2005 and 2009. The results were compared with motorcyclists
aged 35–44, a group that shows a consistent trend of fatalities.

This research found that lack or improper use of helmets, victim ejection, alcohol/drug effects, collisions(head-on, broadside, hit-object), and truck involvement were more likely to result in fatal injuries regardless of age group. Weekend and non-peak hour activity was found to have a strong effect in both the younger and older age groups. Two factors, movement of running off the road preceding a collision and multi-vehicle involvement, were found to be statistically significant factors in increasing older motorcyclist fatalities. Use of street lights in the dark was found to decrease the probability of severe injury for older motorcyclists. Driver type of victim, at-fault driver, local road, and speed violation were significant factors in increasing the fatalities of younger

motorcyclists. Road conditions and collision location factors were not found to be statistically significant to motorcyclist fatalities.

Based on the statistically significant factors identified in this research, the following safety strategies appear to be effective methods of reducing motorcyclist fatalities: public education of alcohol use, promoting helmet use, enforcing heavy vehicle and speed violations, improving roadway facilities, clearer roadway guidance and street lighting systems, and motorcyclist training.

2.5 Conceptual Framework



CHAPTER 3 RESEARCH METHODOLOGY

This descriptive research which aimed to study Risk Behavior of Illegal Racing Motorcyclist, Cause Affecting of Illegal Racing Motorcyclist
And guideline for problem solving of Illegal Racing Motorcyclist in Muang district, Khon Kaen province in order to know the important risk behaviors related to accident prevention further. This chapter contains following detailed topics.

3.1 Research design

3,2 Population and sample

3.3 Research Procedure

3.4 Research Tools

3.5 Data analysis

3.1 Research Design : This is descriptive research , study both Qualitative and Quantitative data.

Steps of study

1. Approach head or sub - head of group of illegal racing motorcyclist.
2.Interview them at the repairing and decoration motorcycle.
3. Invite them for focus group discussion at Faculty of Public Health.
4. Observation their activities at the real situation.
5. All steps are positive and courtesy approach

3.2 Population and samples Illegal racing motorcyclist youth by accidental sampling and snow ball .

Limitation: Study in Khon Kaen Provinces, the Northeast of Thailand.

3.3 Research Procedure.

Descriptive research study both quantitative data and qualitative data.

Quantitative data.

Quantitative data collected by using questionnaire which conducted by researchers and approving by advisers for validity test and interview illegal racing motorcyclists at repair motorcycle shop in daytime.

Qualitative data.

Qualitative data collected by using In-depth interview and focus group discussion as well as observation, take picture for Qualitative and questionnaire data for Quantitative.

3.4 Research Tools

The research tools were questionnaires for quantitative data and guideline interview for In-depth interview and focus group discussion. Including camera for taking photo in real situation.

3.5 Data analysis

Quantitative data.

Bring information to the correctness, put them into code and analyze with computer by using the statistical package SPSS program for descriptive statistic.

Qualitative data.

Qualitative data using content analysis for categorizing and theme.

CHAPTER 4 RESULTS AND DISCUSSION

The results of this descriptive study were base on the response of 200 illegal racing motorcyclist. The result will be present in 2 parts, firstly quantitative part and secondly was qualitative part.

Part 1. Quantitative part
1. General characteristics of participants.
1.1 Demography of characteristics of participants
1.2 Risk behavior of Illegal racing Motorcyclist
1.3 Cause of Motorcyclist racing
1.4 Guideline for decreasing risk behavior from Motorcyclist racing

Part 2. Qualitative part
Predisposing factor
Enabling factor
Reinforcing factor.
Qualitative data from in-depth interview, focus group discussion and observation.

3.Discussion

4.1 Part 1. Quantitative data

1. General characteristics of Illegal Motorcyclist Racing

1.1 General characteristics of participants

The total sample size consists of 200 illegal motorcyclists in Muang district, Khon Kaen. Most of them had age group of 15 years old (21.5%)and 16,18 years old (18%). Most of the were male 174 (87%) and female 26(13%) ,single 188 (94%) ,student 113 (56.5) , secondary school 86 (43) and primary school 77(38.5) . They live in Khon Kaen municipality 135 (67.5) .

Table 1 Socio-demographic characteristic of stakeholders

Socio-demographic characteristic	No (n = 200)	percentage
1. Age (years old)		
14	20	10.00
15	43	21.50
16	36	18.00
17	19	9.50
18	36	18.00
19	14	7.00
21	7	3.50
22	2	1.00
24	7	3.5
30	2	1.00
2. Sex		
Male	174	87.00
Female	26	13.00
3. Housing		
Khon Kaen Municipality	135	67.50
Outside Khon Kaen Municipality	41	2050
Other District, KhonKaen Municipality	16	8.00
Other province	2	1.00
4. Marital status		
single	188	94.00
Married	10	5.00
Widowed	2	1.00
5. Education		
Primary school	77	38.50
Secondary school	86	43.00
Diploma	15	7.50
Bachelor degree	11	5.50
Other	11	5.50

Section 2 Risk behavior of Illegal racing Motorcyclist

The participants were found that helmet using when riding sometime 102 (51 %), Period of Motorcyclist racing was after midnight – 2 am 110 (55%), Friday and Saturday Night160 (80%), speed was 60-100 Km Per hour 131 (65.5%), Risk of Motorcyclist racing was Accident 92(46%) and subsequently was Blame by Parent, social and Policeman and negative

approach56(28%) and Unhealthy from lately sleeping 52(26%), Place of Motorcyclist racing was Sri chan Road 91 (45.5%) and subsequently was Mitrapap Road 90 (45%), Power of Motorcycle most using 100 -150 CC 123(61.5%), Decoration for increasing sound 70(35%) and Decoration for add equipment70 (35%), A little bit alcohol drinking during Motorcyclist racing 114(57%) as Table 2

Table 2 Risk behavior of Illegal racing Motorcyclist

Items	Opinion		
1.Helmet Using when riding	Always 50(25)	Sometime 102(51)	seldom 45(22.5)
2. How many accompany	Only one	2 persons	3 persons
3. Period of Motorcyclist racing	Before Midnight 69(34.5)	After Midnight – 2 am 110(55)	After Midnight – 6 am 65(32.5)
4. Day of Motorcyclist racing	Monday to Thursday night 13(6.5)	Friday and Saturday Night 160(80)	Not sure 27(13.5)
5. Speed per hour	Less than 60 Km Per hour 13(6.5)	60-100 Km Per hour 131(65.5)	More than 100 Km Per hour 56(28)
6. Risk of Motorcyclist racing	Accident 92(46)	Unhealthy from lately sleeping 52(26)	Blame by Parent, social and Policeman and negative approach 56(28)
7. Place of Motorcyclist racing	Sri chan Road 91 (45.5)	Mitrapap Road 90 (45)	ETC 19(9.5)
8. Power of Motorcycle using	Less than 100 CC 25(12.5)	100 -150 CC 123(61.5)	More than 150 CC 52(26)
9. Decoration of Motorcycle	Decoration for increasing sound 70(35)	Decoration for small seat 60(30)	Decoration for add equipment 70(35)
10. Alcohol drinking during Motorcyclist racing	No alcohol 68(34)	A little bit 114(57)	Much Drink 18(9)

Section 3 Cause of Motorcyclist racing

Cause of Motorcyclist racing most were Enjoyable169 (84.5%), Increasing number of Friends167 (83.5%), Challenge and exiting 163 (81.5%), Stress Management 159 (79.5%) and the least motivation was Interesting reward85 (42.5%) as table 3

Table 3 Cause of Motorcyclist racing

Cause	Opinion			
	Yes	No	Not sure	No response
1. Need to trial motivation of Motorcyclist racing	139 (69.5)	39 (19.5)	22 (11)	
2. . Interesting reward	85 (42.5)	67 (33.5)	48 (24)	
3.Stress Management	159 (79.5)	33 (16.5)	8 (4)	
4. Hobby	139 (69.5)	29 (14.5)	32 (16)	
5. Enjoyable	169 (84.5)	21 (10.5)	8 (4)	2(1)
6. Increasing number of Friends	167 (83.5)	12 (6)	21 (10.5)	
7. Acceptance of friends	140 (70)	17 (8.5)	43 (21.5)	
8. Challenge and exiting	163 (81.5)	23 (11.5)	14 (7)	
9. extreme feeling	155 (77.5)	27 (13.5)	16 (8)	2(1)
10. Freedom	128 (64)	19 (9.5)	53 (26.5)	
11. Youth life	124 (62)	25 (12.5)	51 (25.5)	
12. Following of friend convincing	101 (69.5)	55 (27.5)	44 (22)	

Section 4 Guideline for decreasing risk behavior from Motorcyclist racing

The guideline for decreasing risk behavior from Motorcyclist racing were the illegal motorcyclist racing need overview of other treat Motorcyclist racing as a normal activity 126 (63%), and should be provide of accident prevention 122(61%), Need counseling or helper to suggestion for good opportunity and good future 113(56.5) need more attention from Parents and teacher100 (50%), Need favorite hobby 100 (50%), Need the good job 99 (49.5%) Need play music more than racing 94 (47.5%) at the least need was Need to quit of Motorcyclist racing next 6 months 54 (27%) as table 4.

Table 4 Guideline for decreasing risk behavior from Motorcyclist racing

Item	Opinion level			
	Yes	No	Not sure	No response
1. Need more attention from Parents and teacher	100 (50)	46 (23)	57 (27)	
2. Governance or community should prepare specific place for racing .	83 (41.5)	69 (34.5)	48 (24)	
3. Need play music more than racing	94 (47.5)	47 (23.5)	56 (28)	3 (1.5)
4. Need the good job	99 (49.5)	33 (16.5)	68 (34)	
5. Need favorite hobby	100 (50)	41 (20.5)	59 (29.5)	
6. Motorcyclist racing is normal activity	126 (63)	27 (13.5)	45 (22.5)	2 (1)
7.Motorcyclist racing should be provide of accident prevention.	122 (61)	33 (16.5)	42 (21)	3 (1.5)
8..Suitable Time setting of Motorcyclist racing	90 (45)	50 (25)	60 (30)	
9. Need to quit of Motorcyclist racing next 6 months	54 (27)	62 (31)	81 (40.5)	3 (1.5)
10. Need counseling or helper to suggestion for good opportunity and good future	113 (56.5)	27 (13.5)	60 (30)	

4.2 Part 2 Qualitative data

Cause of Motorcyclist racing by applying follow PRECEDE Model

2.1 Predisposing factor

Predisposing factor focus on opinion, attitude and motivation of illegal racing motorcyclists

found that eager to know, challenging , seeking a new things, need to be a hero, need to be the winner lead them to join these situation.

2.2 Enabling factor

2.2.1 Method of engagement.

They should to have own motorcycle, or have a motorcycle to racing. By had to know group or member who were advised. The youth who no have their own motorcycle. They could join as a follow or accompany. Who is the best riding would be select to be the group representative to racing.

2.2.2 The chance , period and place to racing.

They join the group mostly in weekend , Friday, Saturday or long weekend , started at 10 p.m -12 pm until 1-3 am. Mostly make appointment at repairing store of motorcycle or someplace which appointment after members come together , they start to riding together as a big group and move to the target place together.

2.3 Reinforcing Factor

2.3.1.1Motivator

They were senior of who had experience motivate to join the group, friends, owner of repairing shop. Including some people willing to join by themselves without motivation from anybody.

2.3.2 Effect to other

After join the racing group. They know concerning from their parents especially the first time not led them to joining, but after that they familiar. The other group were the people to blame and don't like their behavior and the other group was support and cheer them to join.

Actually they know about traffic law but they don't concern and ignore traffic law.

Qualitative data From In-dept-Interview

1. The positive effect of racing motorcycle were enjoy, increase closely friends or gang acceptance
made challenge and hero including attractive from girl friend

2. The negative effect of racing motorcycle were dangerous ,risk of road accident made annoy to other people those areas and non quality of life and they cannot sleeping. As well as accident of passengers on the road were effect.

3. The characteristic of racing motorcycle. (date. Time, place and equipment.)
Time : midnight -3-4 AM
Date : Friday and Saturday .
Place : 1. Prachasamosorn Road 2. Mitrapap Road 3.Maliwan Road
4.Srichan Road.

Type of riding: the wheel high up , speed racing ,Decoration motorbike by various equipment .

4. The Motivation of racing motorcycle were reward from motor racing , reward from decoration motorcycle, girl friend, challenge and hero , Identity seeking, increase closely friends or gang acceptance, lonely Home and youth problem, tobacco and alcohol abuse, motorbike repairing stores available and equipment support.

5. The quitting of racing motorcycle were **bored**, disability , gangs were destroyed, arrest by policeman, parent pay more attention.

6. Favorite hobby were interesting such as sport, musical, decoration motorbike

7. The useful of quitting motor cyclist were parents and family were increase happy and decrease worry, decrease traffic accident, decrease social problem and no interrupted other people.

Information from Focus Group Discussion

1. Duration of racing motorcycle mostly were 2 year and subsequently 3 years, 1 years, 4 year and 5 years.

2. Places of racing motorcycle were Mitrapap Road, Prachasamosorn Road, .Maliwan Road, Kangsadan Road and .Srichan Road.

3. Characteristic of motorcycle which always using were had already decoration motorbike

4. Number of membership and name of groups

1. Number of membership : 20, 50, 80-100 persons per group.

2. name of group : sperm, vance vance ,ซิ่งสายฟ้า Sing Saifa , ching yeun classic เชียงยืนคลาสสิค , Khanom krok,ขนมครก, Nonnoi หนอนน้อย, Hoi sang, หอยสังข์ Raberd taek, (ระเบิดแตก) , DID CLUB , ซิ่งข้ามโลก (Zing kamlok), เด็กแว๊นขอนแก่น (Dek Vance Khon Kaen) , sex recing , คนล้อเดียว (One Wheel Man) , ซอยตัน (Soi Tan) หลังเรือนจำ (Lung Rruen Jum of After prison), แก๊งผีเปลือย (Gang Pee Pleiy or Ghost Gang)

3. Reason of name group : Follow senior , talking with friend, look good

5. Money perches per month, source of money and supporter

Money perches per month : 1000, 2000, 3000-10,000 baht

Source of money : Parents , Savings, work

6. Place of Motorcyclist decoration ,equipment decoration
CK Chareun yont , not so cute , RG Chareun yont, Chintana Racing ,
Send to Bang kok and Nakorn prathom
Buy equipment and self decoration.
Equipment decoration such as tube, machine

7. The most challenge of motorcyclist /scoit
challenge : high speed, Show to girl, escape from the police.
negative effect of racing : Disability and dead , Risk of road accident , arrest by police.
8. Problem solving when accident or bad occur such as arrest by policeman.
1. Closely friends or gang acceptance
2. Parents
3. sleep in prison.

9. Safety concerning
Dare to risk, Be careful riding, Helmet wear, some not necessary to concern because high confident.
10. Need of specific racing area or legal racing place
No need, because now are enjoy and had challenge experience to escape policeman.
11. How to Increasing social problem solving)
Quitting illegal racing motorcycle, garbage management, temple cleaning.
12. If have good opportunity to tell anything to power or authority
Need to let illegal racing some day.
13. Experience of traffic accident prevention training , by who arrangement
School
14.Need of role for family . social and nation in the future
Understand and more attention together including forgive, need a good job and earn money for family
15. Most important supporter or need helper
supporter : Parents , friends , senior in the group
Need to tell : Buy a car and stop blaming .

Data from observation

1. Place or Road for racing.
1. Mitrapap Road
2. Prachasamosorn Road
3.Maliwan Road
4.Kangsadan Road
5.Srichan Road.
2. Start and stop of racing of group, make appointment

Time of illegal motorbike is midnight -3-4 AM, make appointment by telephone.

3. Activity of group
Decoration motorbike , racing.

4. Number of group, male and female proportion
- They have several group ,approximately 20, 50, 80-100 persons per group.
- Both Male and Female. Number of male more than female.

5.) Situation , atmosphere
Enjoy and exiting racing without worry, escape from arrest by policeman

4.3 Discussion

1.Risk behavior of Illegal racing Motorcyclist

The participants were found that helmet using when riding sometime102 (51 %), Period of Motorcyclist racing was after midnight – 2 am 110 (55%), Friday and Saturday Night 160 (80%), speed was 60-100 Km Per hour 131 (65.5%), Risk of Motorcyclist racing was Accident 92(46%) and subsequently was Blame by Parent, social and Policeman and negative approach 56(28%) and Unhealthy from lately sleeping 52(26%), Place of Motorcyclist racing was Sri chan Road 91 (45.5%) and subsequently was Mitrapap Road 90 (45%), Power of Motorcycle most using 100 -150 CC123(61.5%), Decoration for increasing sound 70(35%) and Decoration for add equipment70 (35%), A little bit alcohol drinking during Motorcyclist racing 114(57%).

Most of Illegal racing motorcyclist were risk behavior, fast driving, no helmet using, go o bed lately made them risk of unhealthy and effect to their study, stress from blaming from parents and Gordian including alcohol drink. Therefore they should concern about their health, their study including empathy their parents who love and concern always. Especially they should concern about decreasing risk behavior.

2. Cause of Motorcyclist racing

Cause of Motorcyclist racing most were enjoyable169 (84.5%), Increasing number of friends167 (83.5%), challenge and exiting 163 (81.5%), stress Management 159 (79.5%) and the least motivation was Interesting reward85 (42.5%) .

The youth should be concern about the other valuable activities which enjoyable or challenge that low risk like this. The important activities in school and home should available for them such as music, sport, drawing,

poem, Dharma important activities which attractive participation including motivate them to learning other life who need more helping and empathy to convince them from risk as well as they should be assignment to do something else interesting they love for quitting motor racing .

3.Guideline for decreasing risk behavior from Motorcyclist racing

The guideline for decreasing risk behavior from motorcyclist racing were the illegal motorcyclist racing need overview of other treat motorcyclist racing as a normal activity 126 (63%), and should be provide of accident prevention 122(61%), Need counseling or helper to suggestion for good opportunity and good future 113(56.5) need more attention from Parents and teacher100 (50%), Need favorite hobby 100 (50%), Need the good job 99 (49.5%) Need play music more than racing 94 (47.5%) at the least need was Need to quit of Motorcyclist racing next 6 months 54 (27%).

There thinking as child who love to play and need understanding from parents , teacher mean while their characteristic like low confident promptly to be convince to join without consideration and no empathy to both parent and teacher. They should be more attention and soft approach from both parents and teacher. They need to be hero, to be important person, So they seek to be acceptance from outside. If they derived love and attention enough from home and school .. it make they fulfill to be good behavior and could select a good activities..which make the more important and valuable person.

CHAPTER 5 SUMMARY AND RECOMMENDATION

The results of this descriptive study were base on the response of 200 illegal racing motorcyclist. Descriptive research study both qualitative and qualitative data. Study in Muang district, Khon Kaen Province, Thailand 200 Samples of participants. Data were collected by questionnaire for quantitative data meanwhile qualitative data using in depth interview, focus group discussion and observation. Content analysis for qualitative data and descriptive statistics for quantitative data. The results could summarize as follow.

5.1 SUMMARY

Part 1. Quantitative part

1. General characteristics of Illegal Motorcyclist Racing

The total sample size consists of 200 illegal motorcyclists in Muang district, Khon Kaen. Most of them had age group of 15 years old (21.5%)and 16,18 years old (18%). Most of the were male 174 (87%) and female 26(13%) ,single 188 (94%) ,student 113 (56.5) , secondary school 86 (43) and primary school 77(38.5) . They live in Khon Kaen municipality 135 (67.5) . This was the second year of Motorcycle racing joining.

2. Risk behavior of Illegal racing Motorcyclist

The participants were found that helmet using when riding sometime 102 (51 %), Period of Motorcyclist racing was after midnight – 2 am 110 (55%), Friday and Saturday Night160 (80%), speed was 60-100 Km Per hour 131 (65.5%), Risk of Motorcyclist racing was Accident 92(46%) and subsequently was Blame by Parent, social and Policeman and negative approach56(28%) and Unhealthy from lately sleeping 52(26%), Place of Motorcyclist racing was Sri chan Road 91 (45.5%) and subsequently was Mitrapap Road 90 (45%), Power of Motorcycle most using 100 -150 CC 123(61.5%), Decoration for increasing sound 70(35%) and Decoration for add equipment70 (35%), A little bit alcohol drinking during Motorcyclist racing 114(57%).

3 Cause of Motorcyclist racing

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122(61%), Need counseling or helper to suggestion for good opportunity and good future 113(56.5) need more attention from Parents and teacher100 (50%), Need favorite hobby 100 (50%), Need the good job 99 (49.5%) Need play music more than racing 94 (47.5%) at the least need was Need to quit of Motorcyclist racing next 6 months 54 (27%).

Part 2 Qualitative Data

2.1 Predisposing factor

Predisposing factor focus on opinion, attitude and motivation of illegal racing motorcyclists

found that eager to know, challenging , seeking a new things, need to be a hero, need to be the winner lead them to join these situation.

2.2 Enabling factor

2.2.1 Method of engagement.

They should to have own motorcycle, or have a motorcycle to racing. By had to know group or member who were advised. The youth who no have their own motorcycle. They could join as a follow or accompany. Who is the best riding would be select to be the group representative to racing.

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2.3.1.1Motivator

They were senior of who had experience motivate to join the group, friends, owner of repairing shop. Including some people willing to join by themselves without motivation from anybody.

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After join the racing group. They know concerning from their parents especially the first time not led them to joining, but after that they familiar. The other group were the people to blame and don't like their behavior and the other group was support and cheer them to join.

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2. The negative effect of racing motorcycle were dangerous ,risk of road accident made annoy to other people those areas and non quality of life and they cannot sleeping. As well as accident of passengers on the road were effect.

3. The characteristic of racing motorcycle. (date. Time, place and equipment.)
Time : midnight -3-4 AM
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6. Favorite hobby were interesting such as sport, musical, decoration motorbike

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3. Reason of name group : Follow senior , talking with friend, look good

5. Money perches per month, source of money and supporter

Money perches per month : 1000, 2000, 3000-10,000 baht

Source of money : Parents , Savings, work

6. Place of Motorcyclist decoration ,equipment decoration

CK Chareun yont , not so cute , RG Chareun yont, Chintana Racing , Send to Bang kok and Nakorn prathom

Buy equipment and self decoration.

Equipment decoration such as tube, machine

7. The most challenge of motorcyclist /scoit

challenge : high speed, Show to girl, escape from the police.

negative effect of racing : Disability and dead , Risk of road accident , arrest by police.

8. Problem solving when accident or bad occur such as arrest by policeman.

1. Closely friends or gang acceptance
2. Parents
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9. Safety concerning

Dare to risk, Be careful riding, Helmet wear, some not necessary to concern because high confident.

10. Need of specific racing area or legal racing place

No need, because now are enjoy and had challenge experience to escape policeman.

11. How to Increasing social problem solving)

Quitting illegal racing motorcycle, garbage management, temple cleaning.

12. If have good opportunity to tell anything to power or authority

Need to let illegal racing some day.

13. Experience of traffic accident prevention training , by who arrangement

School

14.Need of role for family . social and nation in the future

Understand and more attention together including forgive, need a good job and earn money for family

15. Most important supporter or need helper

supporter : Parents , friends , senior in the group

Need to tell : Buy a car and stop blaming .

Data from observation

1. Place or Road for racing.
    1. Mitrapap Road
    2. Prachasamosorn Road
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2. Start and stop of racing of group, make appointment

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3. Activity of group

Decoration motorbike , racing.

4. Number of group, male and female proportion
    - They have several group ,approximately 20, 50, 80-100 persons per group.
    - Both Male and Female. Number of male more than female.

5.) Situation , atmosphere

Enjoy and exiting racing without worry, escape from arrest by policeman

5.2 Recommendation from research.

1. Committee Setting for support , counseling and friend corner for them would be good for behavior modification by positive and kindly approach.
2. Parent should more attention and understand including make them feel important person, by try to put useful activities both learning and useful hobby for them.
3. School should available various activities and club for students for increasing useful free time and increasing potential in the better way.

5.3 Recommendation for further research

1. Study the effectiveness program for increasing good behavior of these youth.
2. Study various hobbies or effective club are very important to behavior modification of illegal racing motorcyclists.
3. Study a different characteristic of female and male on illegal racing motorcyclists.

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APPENDIX

แบบสอบถาม

แบบสอบถามนี้เป็นส่วนหนึ่งของการวิจัย จะไม่มีเสียใดๆต่อท่าน

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

คำชี้แจง โปรดทำเครื่องหมาย ✓ ลงในช่อง ( ) และกรอกคำตอบให้ชัดเจนตามความเป็นจริง

1. เพศ ( ) 1. ชาย ( ) 2. หญิง

2. อายุ ..... ปี (นับอายุเต็ม)

3. สถานภาพ

( ) 1. โสด ( ) 2. สมรส ( ) 3. หม้าย / หย่า / แยก

4. ระดับการศึกษา กำลังเรียนใช่หรือไม่ ( ) 1.ใช่ ( ) 2.ไม่ได้เรียน ( ) 3. สำเร็จการศึกษาระดับใด

( ) 1. มัธยมศึกษาตอนต้น ( ) 2. มัธยมศึกษาตอนปลาย/ปวช.

( ) 3. อนุปริญญา/ปวส. ( ) 4. ปริญญาตรี

( ) 5. สูงกว่าปริญญาตรี ( ) 6. อื่น ๆ .....

5. ที่อยู่ ( ) 1. ในเขตเทศบาลเมืองขอนแก่น ( ) 2. นอกเขตเทศบาลเมืองขอนแก่น

( ) 3. ต่างอำเภอแต่ใน จังหวัดขอนแก่น ( ) 4. ต่างจังหวัด..ระบุ.....

6 .เข้าร่วมการขับรถมอเตอร์ไซด์แข่งเมื่อใด

( ) 1.) ปีที่ 1 ( ) 2.) ปี 2 ปีแล้ว

( ) 3.) ปี 3 ปีแล้ว ( ) 4) ปี 4 ปีแล้ว

( ) 5). มากกว่า 5 ปีแล้ว

7 . กลุ่มมอเตอร์ไซด์ที่เข้าร่วมเรียกว่า อะไร.....

8. จำนวนสมาชิกมอเตอร์ไซด์ในกลุ่มเท่าใด .....

9. ปัจจุบันอาศัยอยู่กับใคร.....

10.มีรายได้ ไหม เดือนละกี่บาท.....

ส่วนที่ 2 พฤติกรรมเสี่ยงในการขับขี่รถมอเตอร์ไซด์เพื่อแข่งขัน

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริงของท่านมากที่สุด

ข้อความ	ความคิดเห็น			
				สำหรับนักวิจัย

1.สวมหมวกกันน็อคทุกครั้งเมื่อขับขี่หรือไม่	**ทุกครั้ง**	**บางครั้ง**	**นานๆครั้ง**	
2.นั่งซ้อนท้ายคนเดียวหรือไม่	**ซ้อนคนเดียว**	**ซ้อนสองคน**	**ซ้อนสามคน**	
3. ช่วงเวลาในการแข่งขันคือก่อนเที่ยงคืนใช่หรือไม่	**ก่อนเที่ยงคืน**	หลังเที่ยงคืนถึงตีสอง	หลังเที่ยงคืน **ก่อนหกโมงเช้า**	
4. วันที่ขับขี่ในการแข่งขันคือวันใดบ้าง	**คืนวันธรรมดาจันทร์ถึงพฤหัสบดี**	**คืนวันศุกร์ เสาร์**	**ไม่แน่นอน**	
5. ใช้ความเร็วในการขับขี่เท่าใดต่อชั่วโมง	ต่ำกว่า 60 กมต่อชั่วโมง	**60-100** กมต่อชั่วโมง	เร็วกว่า 100 กมต่อชั่วโมง	
6. การขับขี่รถแข่งมีความเสี่ยงอะไรบ้าง	**อุบัติเหตุอาจเกิดขึ้นได้**	**นอนดึกเสียสุขภาพ**	**พ่อแม่ สังคม ตำรวจ ตำหนิมองด้านลบ**	
7. สถานที่ในการขับขี่	**ถนนศรีจันทร์**	**ถนนมิตรภาพ**	**อื่นๆ.ระบุ .....**	
8. รถที่ใช้ในการขับขี่มีความแรงเท่าใด	**ต่ำกว่า 100 CC**	**100 -150 CC**	**มากกว่า150 CC**	
9.ได้ตกแต่งรถเพื่อเพิ่มเสียงให้ดังใช่หรือไม่	**ตกแต่งเพื่อเพิ่มเสียงห้ดัง**	**ตกแต่งเพื่อเพิ่มเบาะให้เตี้ยและเล็ก**	**ตกแต่งเพื่อใส่อุปกรณ์เสริม**	
10.มีการดื่มแอลกอฮอล์ก่อนหรือระหว่างการขับขี่ใช่หรือไม่	**ไม่ดื่มเลย**	**ดื่มบ้าง**	**ดื่มมาก**	

ส่วนที่ 3 สาเหตุของการขับขี่รถมอเตอร์ไซด์เพื่อแข่งขัน

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริงของท่านมากที่สุด

ข้อความ	**ระดับความคิดเห็น**			
	ใช่	**ไม่ใช่**	**ไม่แน่ใจ**	**สำหรับนักวิจัย**
1.เหตุจูงใจที่เข้ามาขับรถมอเตอร์ไซด์แข่งขันคืออยากทดลอง				

2. . มีรางวัลจากการแข่งขันรถที่น่าสนใจ				
3.การแข่งรถ เป็นการผ่อนคลายความเครียดอย่างหนึ่ง				
4. การแข่งรถถือเป็นงานอดิเรก				
5. การแข่งรถทำให้สนุกสนาน				
6. การแข่งรถทำให้มีเพื่อฝูงมาก				
7. การแข่งรถทำให้เป็นที่ยอมรับในกลุ่มเพื่อนๆ				
8. การแข่งรถเป็นสิ่งท้าทาย ตื่นเต้น				
9. การแข่งรถทำให้มีความรู้สึกสะใจ				
10. การแข่งรถ ถือเป็นสิทธิเสรีภาพส่วนตัวอย่างหนึ่ง				
11.อยากใช้ชีวิตวัยรุ่นให้สุดๆไปเลย				
12.มาแข่งเพราะตามเพื่อนๆเท่านั้นเอง				

ส่วนที่ 4 แนวทางลดละเลิกพฤติกรรมเสี่ยงในการขับขี่รถมอเตอร์ไซด์เพื่อแข่งขัน

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริงของท่านมากที่สุด

ข้อความ	ระดับความคิดเห็น			
	ใช่	ไม่ใช่	ไม่แน่ใจ	สำหรับนักวิจัย
1.พ่อแม่ ครู ผู้ใหญ่ให้ความสนใจกว่านี้ เข้าใจและเอาใจใส่มากขึ้น ก็จะเลิกแข่งรถ				
2. รัฐหรือแต่ละชุมชนควรจัดสถานที่ให้ในการแข่งขันโดยเฉพาะ				
3. อยากเล่นดนตรีแทนการแข่งรถไหม				
4. อยากมีงานดีๆทำก็จะเลิกแข่งรถไหม				
5. อยากให้มีงานอดิเรกที่ชอบก็จะ				

เลิกการแข่งรถ				
6.การแข่งรถ ควรถือเป็นเรื่องของธรรมดา				
7.การแข่งรถ ควรได้รับการดูแลให้มีความปลอดภัย				
8. ควรกำหนดเวลาแข่งขันที่เหมาะสม				
9. อยากเลิกการแข่งขันอีก 6 เดือนข้างหน้า				
10. อยากมีสถานที่ ที่มีผู้ใหญ่หรือคนเข้าใจให้คำแนะนำ เพื่อสร้างอนาคตดีๆ				

แนวคำถามเชิงคุณภาพ

แนวคำถามการสัมภาษณ์เชิงลึก (In-dept-Interview)

1. ท่านคิดว่าการแข่งรถมีผลดีต่อท่านและส่วนรวมอย่างไร

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2. ท่านคิดว่าการแข่งรถมีผลเสียต่อท่านและส่วนรวมอย่างไร

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3. ลักษณะของการขับแข่ง มีลักษณะอย่างไรบ้าง (วัน เวลา สถานที่ อุปกรณ์)

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4. เหตุจูงใจที่ทำให้มาร่วมแข่งขันมีอะไรบ้าง (สนุกสนาน รางวัล เพื่อน ครอบครัว มีผู้สนับสนุน)

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5. สิ่งที่จะทำให้ ลดละเลิกพฤติกรรมการขับรถแข่งมีอะไรบ้างๆ

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6. งานอดิเรกที่น่าสนใจและเป็นประโยชน์มีอะไรบ้าง (ดนตรี กีฬา งาน)

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..... 7. ถ้าเลิกการขับรถแข่งแล้วจะมีผลต่อท่านและครอบครัว สังคมอย่างไร

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แนวคำถามสำหรับการสนทนากลุ่ม

(Focus Group Discussion)

1. ส่วนมากระยะเวลาในการมาขับรถแข่ง กี่ปี
2. สถานที่ในการประลองความเร็ว/ขับขี่ ที่ใดบ้าง
3. รถที่นำมาใช้ส่วนมากมีสภาพเป็นอย่างไร
4. ในกลุ่มมีสมาชิกกี่คน / ตั้งชื่อกลุ่มหรือไม่ ชื่อว่าอะไร /เพราะเหตุใดจึงใช้ชื่อนั้น
5. จำนวนเงินที่ใช้ในการแต่งรถจำนวนเท่าไหร่ ต่อเดือน / แหล่งที่มาของเงิน / มีใครสนับสนุน
6. สถานที่ ที่ในการไปตกแต่งรถ ที่ไหน ร้านใดบ้าง ตกแต่งอะไรบ้าง
7. สิ่งที่ท้าทายที่สุดในการเป็นเด็กแว้น/สก็อยท์ / มีความเสี่ยงอะไรบ้าง
8. เมื่อเกิดอุบัติเหตุ / หรือมีปัญหาเช่นถูกจับกุม ทำอย่างไร
9. คำนึงถึงความปลอดภัยอย่างไร บ้าง
10. อยากให้มีสนามแข่งรถโดยเฉพาะหรือไม่ / มีการจัดการแข่งขันที่เป็นระเบียบหรือไม่
11. เรามีส่วนแก้ไขปัญหาสังคมให้ดีขึ้นอย่างไร
12. ถ้ามีโอกาสบอกผู้ใหญ่ที่มีอำนาจ อยากบอกอะไร อะไรบ้าง
13. เคยเข้าอบรมอะไรบ้าง โดยหน่วยงานใดเป็นผู้จัด
14. อยากมีบทบาทสำคัญอะไรในอนาคตต่อครอบครัว สังคม และประเทศชาติ
15. ใครที่เราพึ่งได้มากที่สุด หรือช่วยเราได้มากที่สุด.....หรืออยากให้ใครช่วยในเรื่องใดบ้าง

แนวทางการสังเกตการณ์กลุ่มรถจักรยานยนต์แข่งขัน

วัตถุประสงค์เพื่อ ให้ทราบถึงวิธีการรวมกลุ่ม สถานที่ ระยะเวลา และพฤติกรรมขณะที่เกิดการรวมกลุ่ม โดยมีแนวทางการสังเกต มีดังนี้

1. สถานที่ อยู่ถนนอะไร ระยะทางในการแข่งขันกี่ ยาวแค่ไหน กี่ กม

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2. เวลาเริ่มรวมกลุ่ม เวลาเลิกการรวมกลุ่ม (มีการนัดหมายกันอย่างไร)

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3. กิจกรรมที่ทำในระหว่างการรวมกลุ่ม (สมาชิกมีการแสดงออกอย่างไรบ้าง มีกิจกรรมอะไร)

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4. จำนวนสมาชิกในการรวมกลุ่มแต่ละครั้ง กี่คน ระหว่างผู้หญิง หรือชายมากกว่ากัน

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5. เหตุการณ์ และสถานการณ์อื่นๆที่เกิดขึ้น (มี บรรยากาศเป็นอย่างไรบ้าง มีประชาชนหรือ เหตุการณ์อย่างไรบ้าง)

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แบบสอบถาม/สัมภาษณ์

1. ชื่อ สกุล อายุ ปี
2. จบการศึกษาระดับ .....
3. ระยะเวลาในการเป็นเด็กแว้นท์/สก๊อยท์.....ปี
4. สถานที่ในการประลองความเร็ว/ขับขี่
5. เหตุจูงใจที่เข้ามาเป็นเด็กแว้นท์ / มีใคร หรือ อะไรคือสิ่งชักนำ
6. เป็นสมาชิก หรือ เป็นตัวนำในกลุ่มเด็กแว้น / ทำหน้าที่อะไร
7. มีรถส่วนตัวหรือใช้รถของใคร/ ใครสนับสนุน
8. ในกลุ่มมีสมาชิกกี่คน / ตั้งชื่อกลุ่มหรือไม่ ชื่อว่าอะไร /เพราะเหตุใดจึงใช้ชื่อนั้น
9. จำนวนเงินที่ใช้ในการแต่งรถจำนวนเท่าไหร่ ต่อเดือน / แหล่งที่มาของเงิน / มีใครสนับสนุน
10. สถานที่ ที่ไปแต่งรถ ที่ไหน ร้านใด
11. ช่วงเวลาใดที่ออกไปขับขี่
12. สิ่งที่ท้าทายที่สุดในการเป็นเด็กแว้น/สก็อยท์ / มีความเสี่ยงอะไรบ้าง
13.เมื่อเกิดอุบัติเหตุ / ถูกจับกุม รู้สึกอย่างไร
14.การแต่งกายเด็กแว้นท์/สก๊อยท์ เป็นอย่างไร
15. รางวัลจากการแข่งขันคืออะไร / ของพนัน คืออะไร
16. อยากให้มีสนามแข่งรถโดยเฉพาะหรือไม่ / มีการจัดการแข่งขันที่เป็นระเบียบหรือไม่
17. รู้สึกอย่างไรที่ถูกมองไม่ดี / เป็นการทำผิด/ขยะสังคม
18. การแก้ไขปัญหาเด็กแว้นท์ คุณคิดว่าวิธีการใดเหมาะสมที่สุด
19. หากทำอะไรเพื่อสังคมได้ คุณอยากทำอะไร
20. อยากบอกอะไร กับผู้ใหญ่/ ผู้ที่เกี่ยวข้อง

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