# MITSUI SUMITOMO INSURANCE WELFARE FOUNDATION RESEARCH GRANT 2018

Report Thailand

# **REPORT OF RESEARCH RESULTS**

(A) Title: An examination of the factors that influence young drivers' willingness to speed and text while driving for sustainable encouragement of safety driving in Thailand.

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## (c) Summary:

(d) Aim of Research: The purpose of this study was to examine young drivers' beliefs, perceptions, and decision-making processes that may determine their willingness to engage in four risky driving behaviours: texting while driving, texting while stopped, high level speeding and low level speeding. The predict factor of young drivers' (non-intentional) willingness to engage in these aforementioned on road behaviours was investigated for proposing the sustainable prevention of traffic injury in Thailand.

(e) Method of Research & Progression: The 400 young drivers aged 18–25 years from the sampling equation with 95% confidence interval with Thai driver license were recruited via the driver license extension at the provincial level of Department of Land Transport. The five provinces throughout Thailand including Bangkok, Nakhon Ratchasima, Chon Buri, Udon Thani, and Chiang Mai based on the highest dead case of young driver injury will be collected by the developed questionnaire. A questionnaire from the report of Preece et al (20017) will be modified and used to collect participant data for this study. Participants will be approached and invited to participate the study by trained research assistants. Face-to-face interview will be conducted if subject agree to be participate the study with approximately 25 min to complete. Approval for the current study will be granted by the Mahidol University Research Ethics Committee.

Data will double entry in the computer software for analysis. IBM SPSS will be used to conduct all analyses for the current data and the data file was checked for any incomplete or missing data. Multivariate regression analysis will be used to examine the factors that influence young drivers' willingness to speed and text while driving which will be an important element of developing preventive strategies for enabling sustains safety driving.

#### (f) Results of Research

Participants were 524 young drivers recruited from five part of Thailand, which was the high death case of young driver (Table 1) including 111, 258, 79 and 104 of young drivers from North, Northeast, Central and Capital parts of Thailand, respectively. Ages ranged between 18 and 25 years (M = 22.7, SD = 2.13). Of the 525 remaining participants, 276 (50.0 %) were male and 276 (50.0%) were female.

Table 1. Driver's characteristic

Items	Number	Percent
Study area		
North	111	20.1
Northeast	258	46.7
Central	79	14.3
Capital	104	18.8
Age	Mean 22.7, SD 2	.13 Range 18-25
Sex		-
Male	276	50.0
Female	276	50.0

Table 2 presented the mobile use behavior while driving mentioned that percent of answer, calling and massage were 76.3, 15.1 and 14.1, respectively. Average time spent while driving of young driver were 75.5 of Range 1-50 Mins and 24.5 of Median 2 Min, respectively. Immediate response while the telephone rang

Table 2. Mobile phone use behavior while driving

Items	Number	Percent
Use of mobile while driving		
Answer	422	76.3
Calling	84	15.1
Massage	78	14.1
Average time spent while driving		
Median 2 Min.	135	24.5
Range 1-50 Mins.	390	75.5
Immediate response while the teleph	none rang	
Answer	113	20.5
Not respond	135	24.5
Find out who is		
calling	305	55.3
If you need to use mobile, what will	you do?	
Use while stop at		
the red light	27	4.9
Speed reduction	101	18.1
Stop in the		
sidewalk	216	39.1
Use hand free	189	34.2
Call back later	38	6.9
Experience of traffic injury during mo	bbile phone use last 12 month	IS
Yes	12	2.2
No	513	97.8
Experience of traffic injury last 12 m	onths	
Yes	55	9.9
No	470	90.1

#### Table 3. Driving behaviour of young driver

Items	Number	Percent	
Average of speed use	Mean 86.4, SD.14.4, Range 40-140 Km/hr		
Seatbelt use	473	90	
Know the speed regulation	500	89.9	
Get the ticket cause of high speed	135	24.3	
Alcohol drinking	167	30.3	

### Table 4. Prototype of young driver

Items	Mean	SD	Range
High Level Speeding (HLS)	1.85	0.85	4-1
Low Level Speeding (LLS)	2.74	0.71	4-1
Texting While Driving (TWD)	1.48	0.70	4-1
Texting While Stopped (TWS)	2.77	0.74	4-1
	1=Not agree, 4= Agree		

### Table 5. Altitude of young driver

Items	Mean	SD	Range
High Level Speeding (HLS)	1.80	1.12	5-1
Low Level Speeding (LLS)	2.54	0.92	5-1
Texting While Driving (TWD)	1.19	0.94	5-1
Texting While Stopped (TWS)	2.70	0.80	5-1
	1= Strongly disagree, 5= Strongly agree		

## Table 6. Subjective norm of young driver

Items	Mean	SD	Range
High Level Speeding (HLS)	1.32	0.98	5-1
Low Level Speeding (LLS)	2.91	0.63	5-1
Texting While Driving (TWD)	0.94	0.79	5-1
Texting While Stopped (TWS)	2.79	0.78	5-1
	1= Strongly disagree, 5= Strongly agree		

## Table 7. Driving experience of young driver

Items	Mean	SD	Range
High Level Speeding (HLS)	2.48	0.75	4-1
Low Level Speeding (LLS)	2.63	0.74	4-1
Texting While Driving (TWD)	1.91	0.55	4-1
Texting While Stopped (TWS)	2.61	0.87	4-1
	1=Never, 4= Always		

# Table 8. Prototype favourability

Items	Popular		Careless	
	Number	Percent	Number	Percent
High Level Speeding (HLS)	25	5	435	78.2
Low Level Speeding (LLS)	486	87.4	12	2.2
Texting While Driving (TWD)	5	0.9	538	96.8
Texting While Stopped (TWS)	473	78.6	85	15.3

Pearson's bivariate correlations were first undertaken to assess the relationships between Prototype willingness model, optimism bias, and willingness to text and speed (see Tables 9–12). As expected there were weak to moderate significant positive correlations between age, usual speed, altitude, driving experience, subjective norms, and prototype perception for high level speeding, low level speeding, texting while driving and texting while stopped. Further, age had a significant positive correlation with usual speed to engage in high level speeding, low level speeding, texting while driving and texting while stopped. However, there was no significant relationship between risk perception and willingness for TWD.

For optimism bias, there were significant weak negative correlations between optimism bias and willingness for TWD, TWS, and LLS, There was also a significant weak negative correlation between optimism bias and risk perception for TWD, TWS, HLS, and LLS, suggesting that higher optimism bias scores were associated with lower perceived likeliness to be injured while engaging in these risk-taking behaviours

#### Table 9. Prototype willingness model variables and person correlations for High Level Speeding

Variables	2	3	4	5
1. Age	.143**	.189**	.054	.153**
2. Usual speed	1	.317**	.475**	.289**
3. Attitudes		1	.335**	.483**
4. Driving experience			1	.315**
5. Subjective norms				1

Note \*p<.05, \*\* p<.01

Table 10. Prototype willingness model variables and	person correlations for Low Level Speeding
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Variables	2	3	4	5
1. Age	.143**	-0.049	095*	0.006
2. Usual speed	1	-0.282**	363**	102*
3. Attitudes		1	.257**	.266**
4. Driving experience			1	.161**
5. Subjective norms				1
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Note \*p<.05, \*\* p<.01

#### Table 11. Prototype willingness model variables and person correlations for Texting while driving

2	3	4	5
.143**	.111**	.046	.171**
1	.170**	.077	.133**
	1	.264**	.447**
		1	.196**
			1
	2 .143** 1	2 3 .143** .111** 1 .170** 1	2 3 4   .143** .111** .046   1 .170** .077   1 .264**   1 .11

Note \*p<.05, \*\* p<.01

Table 12. Prototype willingness model variables and person correlations for Texting while stopp
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Variables	2	3	4	5
1. Age	.143**	0.047	.005	.029
2. Usual speed	1	.125**	050	.080
3. Attitudes		1	.010	.463**
4. Driving experience			1	.023
5. Subjective norms				1