Report Instructions

Thailand

REPORT OF RESEARCH RESULTS
REPORT OF UTILISATION OF RESEARCH GRANT

(A) Title: Appropriate Model for Road Safety in World Heritage Site toward Stakeholder Integration: a Case Study of Ayutthaya Province, Thailand.

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(c) Summary: the main finding presented that there was also a significant positive correlation between safety behaviour with safety intention, behaviour control, safety support, safety barrier, network support, information support, material support, knowledge and attitude in the tourist group for World Heritage Site of Ayutthaya Province, Thailand.

(d) Aim of Research: This objective of this research was to develop the appropriate approach for road safety in World Heritage Site toward stakeholder Integration: a case study of Ayutthaya province, Thailand.

(e) Method of Research & Progression: Firstly, the related study and secondary data was to review for developing the measurement tool. The research tool in this study was the reduction behaviour of road safety risk among 414 households and 440 tourists in the World Heritage Site from the sampling equation with 95% confidence interval and was approved by the Mahidol University Research Ethics Committee. Face-to-face interview was conducted if subject agree to be participated the study with approximately 30 min to complete. Data from questionnaire was double entry in the computer software for analysis. IBM SPSS was used to conduct all analyses for the current data and the data file was checked for any incomplete or missing data. Multivariate regression analysis was used to examine the factors that the reduction behaviour of road safety risk among 400 households and 400 tourists in the World Heritage Site. The appropriate approach for road safety in World Heritage Site of Ayutthaya province was developed by the data from these research tools for implementing in the real situation.

(f) Results of Research

The data from Strive road safety culture for road safety citizen by road safety cooperation (2021) reported that the total accident cases in World Heritage Site of Ayutthaya province were 1,916 times in 2021 with the 46.7 percent of dead case, 58.12 percent of female case and 77.51 percent of motorcycle case (Table 1).

Table 1. Situation of road safety in the World Heritage Site of Ayutthaya province in 2021 (Total accident = 1,916 Case)

Items	Number	Percent
Severity level		
Iinjured	1,883	20.1
Dead	33	46.7
Disabled	79	14.3
Sex		
Male	802	41.88
Female	1,144	58.12
Vehicle		
Car	430	22.49
Motorcycle	1,486	77.51

Table 2 presented the respondents' characteristic mentioned that respondents in this study consisted of 414respondents and 440 tourists in World Heritage Site of Ayutthaya Province, Thailand. The results showed that means of age for residents and tourist were 30.9 and 40.2, respectively. Most of both respondents presented the accident experience with the minor accident impact. In additional, driver's license cards of car and motor cycle were found in the both respondents. Above speed of 80 km/h for residents and tourist were 81.6 % and 78.4 %, respectively.

Table 2. Respondents' characteristic

Items	Residents (N,%) (N=414)	Tourist (N,%) (n=440)
Age	Mean 30.9, Range 14-71	Mean 40.2, Range 18-86
Sex		
Male	257 (62.1%)	234 (53.2%)
Female	157 (37.9%)	206 (46.8%)
Education		
Primary	18 (4.3%)	19 (4.3%)
Secondary	148 (35.7%)	52 (11.8%)
Bachelor	226 (54.6%)	296 (67.3%)
Bachelor above	22 (5.3%)	73 (16.6%)
Accident experience		
Yes	248 (59.9%)	349 (79.3%)
Accident impact		
None	142 (34.3%)	221 (50.2%)
Minor	156 (37.1%)	95 (24.6%)
Major	45 (10.9%)	24 (5.5%)
Hospital bed	44 (10.6 %)	9 (2.1%)
Driver's license		
Car	276 (66.7%)	345 (78.4%)
Motorcycle	323 (78.0%)	350 (79.5%)
Breaking traffic rules		
Yes	370 (89.4%)	349 (79.3%)
Speed		
Below 80	76 (18.4%)	95 (21.6%)
Above 80	338 (81.6%)	345 (78.4%

From the survey result (Table 3), the low levels of behaviour intention and the network support was found in the resident group in World Heritage Site of Ayutthaya Province, Thailand. Moreover, the behaviour control and the knowledge of tourists group was found in the low level. In additional, safety behaviour levels among resident and tourist in World Heritage Site of Ayutthaya Province, Thailand were found in the high performance. After that, the correlation between independent variables and safety behaviour was performed by the chi-square test analysis. The results showed that the behaviour control, safety support and safety barrier significantly have positive correlation with the safety behaviour in the resident group for World Heritage Site of Ayutthaya Province, Thailand. Finally, there was also a significant positive correlation between safety behaviour with safety intention, behaviour control, safety support, safety barrier, network support, information support, material support, knowledge and attitude in the tourist group for World Heritage Site of Ayutthaya Province, Thailand.

Table 3 Level of independent variables and association to safety behaviour

Items	Residents							Tourists						
	Low		Moderate		High		P value*	Low		Moderate		High		P value*
	n	%	n	%	n	%		n	%	n	%	n	%	
Safety intention	165	39.9	118	28.5	131	31.6	0.084	61	13.9	107	24.3	272	61.8	<0.001
Behaviour control	61	14.7	159	34.4	194	46.9	<0.001	102	23.2	52	11.8	286	11.8	<0.001
Driver safety support	153	37.1	199	48.1	62	15.0	<0.001	28	6.4	301	68.4	111	25.2	<0.001
Interrupt safety driving	81	19.6	148	35.7	185	44..7	<0.001	65	14.8	95	21.6	280	63.6	<0.001
Network support	113	27.3	245	59.2	56	13.5	0.919	140	31.8	127	28.9	173	39.3	<0.001
Information support	77	18.6	256	61.8	81	19.6	0.134	52	11.8	66	15.0	322	73.2	<0.001
Equipment support	90	21.7	262	63.3	62	15.0	0.413	54	12.3	70	15.9	316	71.8	<0.001
Knowledge	65	15.7	240	58.0	109	26.3	0.057	238	54.1	101	23.1	101	23.1	<0.001
Attitude	75	18.1	100	24.2	239	57.7	0.190	76	17.3	39	8.9	325	73.9	<0.001
Safety behaviour														
Traffic rule	81	19.6	123	29.7	210	50.7		79	18.0	44	10.0	317	72.0	
Carefully drive	24	5.8	128	30.9	262	63.3		81	18.4	54	12.3	305	69.3	
Checking vehicle	139	33.6	85	20.5	190	45.9		72	16.4	30	6.8	338	76.8	

*By Chi-square tests; Independent variables and safety behaviour

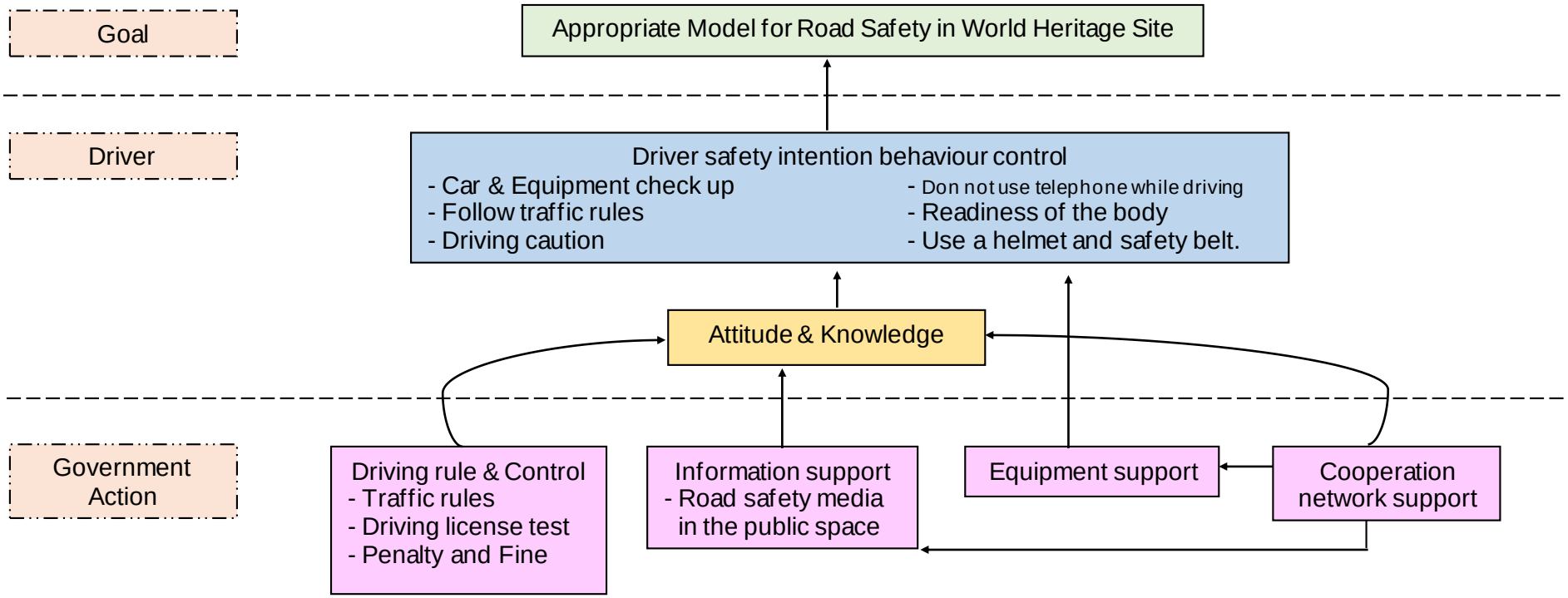

Figure 1: Appropriate Model for Road Safety in World Heritage Site toward Stakeholder Integration: a Case Study of Ayutthaya Province, Thailand

From the result in Table 1-3, the appropriate model of road safety in world heritage site, Ayutthaya province, Thailand should be proposed for implementing in the World Heritage Site (Figure 1).

(g) Future Areas to Take Note of, and Going Forward

- The appropriate model of road safety in World Heritage Site should be proposed for implementing in the other areas such as Sukhothai and Kamphaeng Phet province.

(h) Means of Official Announcement of Research Results

- The government site should be cooperated in this road safety model in World Heritage Site model for enhancing the stakeholder Integration.