

CHAPTER 3

METHODOLOGY

The writer chose to use a questionnaire to survey and study what the factors are that influence motorists' decisions to buy hybrid cars. The method conducted for the survey includes the subjects, materials, data collection procedure, data processing and analysis.

3.1 SUBJECT

In this research, the study population were both male and female car users in Bangkok of different ages, income levels, occupations, and marital statuses. 100 respondents were selected from the population by using accidental sampling technique. A copy of the questionnaire was distributed to each respondent and they were requested to return it to the researcher or assistant on the same day.

3.2 MATERIALS

The research questionnaire was divided into three parts as follows:

3.2.1 The first part was to collect the demographic data of the respondents such as age, gender, education level, marital status, occupation, income level, number of family members in the same household, car ownership status and its engine type.

3.2.2 The second part consisted of questions asking respondents' opinions of marketing activities like product attribute, pricing strategy, place of purchase, and promotional activities.

3.2.3 The third part consisted of questions asking opinions toward behaviours influencing their buying decision of hybrid cars. Respondents were asked to rank the choice from the most important to the least important.

3.2.3.1 Internal influence. This set of questions was asked to measure the level of the respondents' opinion on self-perception, motivation, learning, and attitudes about hybrid cars.

3.2.3.2 Situational influence. Specific situations were asked to measure the respondent's reaction towards the physical environment and timing relating to fuel and environment situations.

3.2.3.3 Social influence. Situations regarding hybrid-oriented culture, subculture, social class, and group membership were given to measure the respondent's reaction.

3.3 PROCEDURE

3.3.1 Research Design

A cross-sectional descriptive design was used in the study about the opinion of the respondents towards hybrid cars.

3.3.1 Data Collection

100 sets of self-administered questionnaires were distributed to motorists in the Bangkok area in September by the researcher and assistants using the accidental sampling technique.

3.4 DATA ANALYSIS

In this research, data were analysed with the Statistical Package for Social Science (SPSS) program version 12.0 and presented into descriptive statistics such as frequency, percentage, and mean score.

The statistic that explained data were as below:

3.4.1 Percentage

$$P = \frac{f}{n} (100)$$

Meaning of the symbols

P = percentage

f = frequency

n = total amount of the respondent

3.4.2 Mean Score

$$\bar{X} = \frac{\sum X}{n}$$

Where as

\bar{X} = mean or average value

$\sum X$ = total scores

n = sample size

3.4.3 Criteria for rating scale

In parts 2 and 3, the researcher utilized Likert Scales to check the respondents' attitude levels as follows:

Response	Value
Strongly agree	5 points
Agree	4 points
Indifferent	3 points
Disagree	2 points
Strongly disagree	1 point

3.4.4 Interval scale

$$\begin{aligned}
 \text{Width of interval scale} &= \frac{\text{Maximum value} - \text{Minimum value}}{\text{Number of level}} \\
 &= \frac{5 - 1}{5} \\
 &= 0.8
 \end{aligned}$$

The result and value of the data will be tested as below

Average value	Result
1.00 – 1.80	The least
1.81 – 2.60	Little
2.61 – 3.40	Fair
3.41 – 4.20	Very much
4.21 – 5.00	The Most