Factors Influencing Haphazard Parking in The Klang Valley, Malaysia

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Abstract
Haphazard parking is viewed as a common practice in Malaysia. But haphazard parking can cause traffic congestion and obstruction as well as road bully incidents. Even though the law has indicated the consequences of haphazard or illegal parking, this practice is still very prominent and extensive. The objective of this study is to examine factors that influenced haphazard parking, which is described as a situation generating inconvenience to other motorists and the general public and at the same time it is illegal. Such a study is important and timely especially in the urban environment in new emerging townships; increase in new and inexperienced drivers each day and brisk vehicle sales are the main contributory factors to road congestion. The research was conducted via questionnaire survey related to motorists’ attitudes, enforcement efficiency and parking bay friendliness. For more accurate results, selected respondents were licensed drivers. Outcomes of the study revealed that insufficient parking bays and the unfriendliness of car park facilities are the main and significant factors contributing to haphazard parking. Factors related to motorists’ attitude and enforcement efficiency were found to be insignificant. With the progress of the country’s economy and changes in drivers’ attitude, this study had also revealed that the authorities have to re-study their town planning policies and guidelines and to explore ways to enforce the law and minimize haphazard parking.

Keywords: Haphazard Parking, Local Government, Motorist, Enforcement, Parking Bays, Malaysia
Introduction

Haphazard or illegal car parking has become a menace and is getting worse in Malaysia. It has become a ‘culture’ and seems uncontrollable especially within the city center and growing townships in Malaysia, particularly in the Klang Valley. Motorists continue to double or triple-park, parking on the pavements and walkways in public areas as well as along public roads with yellow lines. Haphazard parking has become such a norm in many areas even though the law indicates it will spare no effort to clamp down on motorists who park indiscriminately along yellow lines, on pavements and cause obstruction.

The number of compounds that Kuala Lumpur City Council issued has increased dramatically. There has been an increase of 22% compared to the same period in 2014 when they issued 673,295 compounds. It was also reported that about 5,000 compounds were issued daily, and this covers commercial and residential areas and KUALA LUMPUR CITY HALL had towed 6,777 vehicles from January to July in 2015, an average of 50 a day. The number of vehicles being towed away from restricted parking areas has also increased tremendously (Kuala Lumpur City Council Report, 2015). This scenario has indeed indicated that the attitude of motorists has become more ill-mannered.

Adding to the traffic congestion and chaotic situation is the presence of ad-hoc hawkers plying their trade and inconsiderate food and beverage operators who occupied the parking bays, thus adding to the chaos. Meanwhile, motorists had developed a "friendly" system, such as putting up a note with their contact details on the windscreen in case the ‘blocked’ vehicle needs to be driven away. It is also a common sight that motorists from the commercial area had turned residential roads into car parks, creating frustration and at times anger in the residential community.

What seems to have worsened the situation is the growing number of vehicles plying the road daily. According to the Malaysia Road Transport Department, the only federal government agency authorized to register new vehicles and to test and to license an individual to drive, there were 583,060 vehicles of all types driven and registered nationwide in 2013 (Road Transport Department, 2014). With the buoyant economic situation and the affordability of new or used vehicles and financial institutions playing a major role in supporting the local automobile industry through attractive financing packages, the trend for new vehicle registration is expected to be the same for 2014 and beyond. It was reported that more than 1.8 million vehicles enter the city every day and the numbers keep increasing (Kuala Lumpur City Council Report, 2015). In general, most motorist will feel stressed and at times frustrated when cars are haphazardly parked especially when it narrowed down the driveway or blocked roads at times leading to unnecessary commotion such as continuous loud honking, exchange of unpleasant words and such uncontrollable situation may erupt into damaging vehicles or even into physical fights.

Ideally, all motorists regardless of types of vehicles must be courteous, disciplined and abide by the law and to be considerate to other road users, motorist and the public in general. In Malaysia, the Road Transport Act 1987 clearly stipulated that it is an “Act to make provision for the regulation of motor vehicles and of traffic on roads and other matters with respect to roads and vehicles thereon; to make provision for the protection of third parties against risks
arising out of the use of motor vehicles; to make provision for the co-ordination and control of means of and facilities for transport; to make provision for the co-ordination and control of means of and facilities for construction and adaptation of motor vehicles; and to make provision for connected purposes” (RTA, 1987) and it is expected to be followed closely by all motorists to avoid prosecution.

Following the traffic rules and not provoking other motorists and avoiding unnecessary emotional tension will do a lot of good to the traffic situation and minimize congestion. With the relevant authorities exercising their roles effectively and carrying out enforcement effort regularly with tougher action taken and or to impose heavier fine or even to tow their vehicles away will be ways to eliminate haphazard parking. Furthermore, greater effort in carrying out awareness campaigns by the authorities to discourage repeated offences and encourage carpooling or public transport could be a way to tackle the situation. However, those ideal points highlighted posed more as challenges especially in the Malaysian context where issues arise, particularly at the city center and growing townships within the Klang Valley.

The first issue is that the motorists’ mindset and having the ‘couldn’t be bothered’ attitude often leads to tense moments. Car horns will start blaring thus creating unnecessary noise and inflicting frustration on innocent people. Most of the time motorists have to wait for the appearance of the driver or owner of the vehicle that blocked other motorists, which easily can last a couple of minutes and at times it may run into hours. The motorists’ inconsideration and behavior has not only affected other innocent motorists and created unnecessary traffic congestion, it can also become one of the main factors discouraging others to shop and to dine at the said chaotic area and this could also affect the retail and commercial activities in the vicinity.

The second issue is the lack of regular and effective enforcement conducted by the authorities. Generally, in the haphazard parking context, motorists do not have fear that the law will be after them. Even though many motorists are being issued with summonses and compounds by the police and local councils that normally can be seen attached to the car wipers, the motorists still exhibit a care-less attitude that encourages them to repeat the same offences whenever and wherever convenient to them. Moreover, having unclear demarcation of local council and federal government boundaries especially at some newly established areas had stymied the enforcement team.

Adding to that, insufficient warning signage or indication that haphazard parking is illegal has prevented the much needed education process that is necessary to minimize the haphazard parking situation. Perhaps the directional signboards put up in the early development stage of the township are now outdated too.

The third issue is the lack of parking bays or facilities especially in areas where commercial activities are overwhelming or where retail, food and beverage outlets are the main attraction and it is a common sight to see motorists parked haphazardly especially when they have it in their mind “just for a short while”. It is quite serious and alarming if motorists’ attitude remained unchanged.

Besides that, it has been observed that motorist will not like to go further than their destination even though there are ample parking bays at a not so far distance; perhaps they
perceived the short distance as inconvenient. Moreover, nowadays when security and safety has becomes a major public concern and most of the authority owned public multi-storey car parks were un-manned and underused especially during the night, thus discouraging motorists from parking there. Other than that, parking bays and facilities that are not friendly to lady drivers, the elderly and the handicapped can be a setback too.

Therefore this research is timely and important to be conducted to reduce the unnecessary traffic congestion and improve the parking management, design and facilities provided by the government or private sectors in any approved development. The main objective of this research is to examine the problems contributing to haphazard parking. The purpose of the study is to discuss the influencing factors on haphazard parking such as motorist, enforcement and parking bays and to review how the situation can be overcome before it becomes uncontrollable. The study focuses on motorist, enforcement and parking bays and at a later stage will investigate the relationship between these variables and haphazard parking.

**Drive-Reduction Theory of Motivation**

With limited theories that can relate directly to haphazard parking, the Drive-Reduction Theory of Motivation in my opinion is the theory considered relevant in the context of motorist’s behavior particularly in haphazard parking. This theory was established by Hull in 1943 as a motivational theory that leads to the major cause of learning and behavior. Generally, motivation is divided into two: intrinsic and extrinsic. And a person’s motivation can be divided into achievement, affiliation, competence, power and attitude motivation. Achievement motivation is the drive in pursuing goals such as advancing in the ladder of success in career and for the person’s sake and not so much on the benefits and reward attached with it. Affiliation motivation is the drive to relate to others in the social context. Such individual will perform better when complimented for their favorable attitudes and cooperation. Competence motivation drives a person to perform high quality works such as job mastery, special problem-solving skills and always strive to overcome obstacles when confronted with them and power motivation is a drive to influence people and change or improve situations. Normally power motivated individuals will create an impact on the organization and they are risk takers. Finally, attitude motivation relates to how people think and feel, their self-confidence, their belief and their attitude in life. Attitudes are infectious and can affect the people near the person exhibiting a given attitude, which in turn can influence their behavior as well.

The research that Hull had performed demonstrated that his theory could predict behavior and his emphasis was on experimentation, an organized theory of learning, and the nature of habits, which he argued were associations between a stimulus and a response. Behaviors were influenced by goals that sought to satisfy primary drives -- such as hunger, thirst, sex, and the avoidance of pain. The systematic behavior theory by Hull is also known as the drive theory, which is a reinforcement system, meaning that in learning, habits are initially formed by reinforcing certain behaviors (Hull, 1943). Hull believed that human behavior is a result of the constant interaction between the organism and its environment. Even though Hull uses the basic needs such as food and water to carry out the experiment during his research to
satisfy the biological needs, and since this theory also reinforces certain behavior, thus in this project, the writer’s opinion is that this theory is also applicable and suitable to explain motorists who have the initial need of a parking space and having the drive to satisfy their own needs that is to park the vehicle and to carry out what they intended to do at that very moment. Motorist will be intrinsically motivated to do something for their own sake and enjoy seeking out new challenges such as defying the law, since haphazard parking is illegal.

We often see motivation as something that stimulates a person to act and behave to achieve a desired goal, while emotion is the feeling emerging from the motive or drive itself, from the actions caused by the motive and from the achievement or failure of the desired goal. While impulsivity is the general term used to describe a tendency to act quickly, normally it is without thinking or caring about the consequences. Impulsivity can be a normal trait. In extreme forms, however, it can be a symptom of certain behavioral disorders. In other words, when your body tells you that you 'need something,' or that you need to 'change something,' this is your body and your mind giving you a drive to arrive to your desire without taking into consideration the after effect, consequences, inconveniences to other motorists and the long arm of the law. In this situation, once the motorists initiated illegal or haphazard parking, most of the time they would experience a drive reduction syndrome since there would not be any drive for them to seek for another proper parking bay until there is an awakening and the need arises such as an enforcement activity being carried out by the authorities or upon receiving major complaints from other road users. Thereafter, the person undergoes a cycle to re-start the drive to cater to the need to remove the vehicle and to find another parking spot.

Hull further clarifies that when survival is in peril, the living being is in a condition of need (when the natural prerequisites for survival are not being met) so the life form acts to diminish that need. Essentially, the life form acts in a manner that strengthens the ideal organic conditions required for survival. Drive-reduction theory also emphasizes the role that habits play in the type of behavioral response in which we engage. A habit is a pattern of behavior in which we regularly engage; once we have engaged in a behavior that successfully reduces a drive, we are more likely to engage in that behavior whenever faced with that drive in the future. However, his hypothesis was scrutinized for the absence of generalizability because of the way he characterized his variables in such exact quantitative terms. Hull was just intrigued by operational depictions of what was detectable. He did not deny subjective viewpoints, for example, reason, thoughts, knowledge, understanding, qualities, or information, yet since these attributes could not be directly observed, he did exclude them as a major aspect of his theoretical constructs. He devised mind-boggling analytics to measure conduct. Thus, Hull's adherence to a mathematical and formal system of theory building is open to both praise and criticism. In summary, what motivates a person could drive his or her attitude into a behavior, unconsciously.

Positive Law Theory

Laws that are supposed to apply to everyone equally are rules made through either a democratic processes or dictated by the government that forbid certain actions and are enforced by the courts. If anyone breaks a law, it could lead to a fine, jail term or other
consequences such as performing community service and even death sentence. In the Malaysian context, laws are passed and established through Parliament and also by various local state government and its agencies. The classical version of positive law theory is the "command theory" (Austin, 1869). Austin’s model was that of a definition and his goal was to give a definition of law that removed all evaluative language. While he rejected the blurring of law and morality, he did give a similar "unified" definition of law: "A rule laid down for the guidance of an intelligent being by an intelligent being having power over him." God and men both make laws so his distinction is between the laws of God (reason) and those of historical human societies made by political "superiors." He insisted on distinguishing the theory of (concept of) law from the "science of legislation" which had to do with the criticism (evaluation) of the law (c.f. Dworkin's theory of legislative justice).

There is a further element that Austin thinks is inherent in the notion of law--namely that of punishment. However, one of the most devastating criticisms of Austin's theory comes from other "positivists." Hart (2012), who raised the problem alluded to the mob of gangsters on an island. Their requests on the local populace appear to meet Austin's definition yet it is the inverse of a guideline of law. Meanwhile, the idea of the Pure Theory of Law was propounded by the formidable Austrian jurist and philosopher, Hans Kelsen (1881–1973). He developed an interesting modern version of positivism around this implicit criticism of Austin. He is still dedicated to the partition of law and ethics; however he tries to dodge Austin's slip-up of decreasing commitments to non-good propensities, probabilities, damages and expressions. Kelsen is still a positivist in that he concurs that law must arise from social developments as opposed to deductions from reason. The key proof for this is that open law is adaptable and dynamic as opposed to God's law, which never shows signs of change. However, Kelsen recognized that law must also have a normative base. Consistently, he summarizes, there must be an essential standard on which law rests. Another pundit said that the request of common law is part of a human psychological need "to believe in a just and ordered universe" (Jamieson, 1973). Against human jurisprudence, which has historically been corruptible and self-serving of elitism, the appeal to natural law petitions for relief in an "ever-just, unchangeable law above the law." Since natural law is argued to be unchangeable, the person who evokes such law, "appeals to self-evident principles that can be known by all humans". The law affects nearly every aspect of our lives every day that governs our daily event and situation such as driving a car, doing a job, and even in social and married life. There are also laws to deal with commercial dealings and crimes such as robbery and murder. Laws give us rules of conduct that protect everyone’s rights in any country and situation (Frank, 2011).

Principles and Theories of Local Government

In the Malaysian context, local government not only refers primarily to municipalities, but it also includes a variety of local special purpose bodies such as agencies, boards and commissions. Collectively, those institutions form a regime or system of local governance. As an example, Petaling Jaya City Council is a municipal council while the Kuala Lumpur City Hall Commissioner of Buildings comes under the Property Management and Valuation Department and carries out its duties as the Commissioner of Buildings of Kuala Lumpur as provided under

The role of local government is viewed in the context of the overall role of government per se. An advantage of local government lies in its ability to arrange for providing local public goods in line with local tastes and preferences. A number of arguments suggest that local governments should be assigned adequate powers of local taxation to finance their expenditure responsibilities rather than having to rely on a central government grant (Watt, 2006). Since the central purpose of all organizations is to make possible in the most efficient way the attainment of some common objectives, the objectives sought have an important bearing on the form or type of institutions used. Typically, people form a local government institution when they determine they can do things acting together, which they cannot do effectively as individuals. Hence local government constitutes an institutional and legal device that enables individuals to act collectively for their safety and general well-being to enforce rules and regulation within its area. Generally, local government is formed when the benefits of cooperative action outweigh the enjoyments and freedom of individuals, or when societal goals are viewed as being mutually beneficial.

The need for local government occurs when people live in sufficiently close association that community problems arise or that it becomes feasible to collaborate as a group to attain certain mutually desired ends. Local government is largely influenced by its two basic roles or functions, which are generally recognized and accepted as administration (of services) and representation (expression of people’s wishes). Local government organization performance, consequently, should be measured mainly by its effectiveness in carrying out these two functions. Over time, and depending on the geographical context, either of these functions may be emphasized or receive more attention (Crawford, 1955 & Tindal 1977). However, it is important to realize that one function cannot be carried out at the exclusion of the other. Local institutions exist not only to provide certain services but also to represent the wishes of their residents. According to Tindal (1977) consolidating these parts proposes that local government exists to give administrations the understanding of the needs and wishes of its local community.

METHODOLOGY

Descriptive research refers to research that describe the characteristics of variables of interest in a situation such as object, people, group, organization or environments. In other words, this research is trying to paint a picture or describe the scenario of the research situation from an individual or organizational perspective. Causal research refers to research that allows causal inferences to be made, seeks to identify cause-and-effect relationships. This research is carried out if the decision maker knows what causes an important outcome and dismisses other causes unrelated to the situation (Zikmund et al., 2013). However, if the decision maker is only interested to find out the important factors associated with a situation, then the research will be a correlational study (Sekaran & Bougie, 2010). Test-market is a good example, which is frequently conducted within an actual business conditions. (Zikmund et al., 2013, p. 57); meanwhile correlational study is viewed as investigating or measuring the degree

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of associations or relationship between variables, not cause and the effect, not one variable on another (Creswell, 2003). Cross-sectional studies refer to studies undertaken at a single point of time where data are gathered once in a period of days, weeks or months (Sekaran & Bougie, 2010 p. 119) and they differ from longitudinal studies where observations and data gathering are collected at different points of time over a long period (Sekaran & Bougie, 2010 p. 119).

For this research and in order to study the factors influencing haphazard parking situation in selected matured township, descriptive and causal research design is chosen as it meets the decision maker objective in understanding the factors influencing the situation. The research design also includes correlational studies whereby it describes the factors related to haphazard parking.

Quantitative research method can be defined as research that addresses research objectives through empirical assessments that involve numerical measurement and analysis approaches. Quantitative researchers measure concepts with scales that either directly or indirectly provide numeric values. Quantitative research refers to a numeric and statistical approach to research design (Carrie, 2007). In contrast, qualitative research is more interested in observing, listening and interpreting. As such the researcher is intimately involved in the research process and in constructing the results. For these reasons, qualitative research is said to be more subjective, meaning that the results are researcher-dependent (Zikmund et al., 2013 p. 134). The research method adopted for this study will be quantitative method. The main factor leading to this choice is the large population in this study, which is the general public and the constraint of time. Under such circumstances, the researcher is able to use the literature review findings to prepare a structured survey questionnaire to evaluate the factors influencing haphazard parking in the chosen environment.

In this research, the population refers to the public who had attained the age of 18 years old and are licensed to drive. A sample is a subset or some part, of a larger population. The purpose of sampling is to estimate an unknown characteristic of a population. The sampling process involves using a portion of a population to make conclusions about the whole population (Zikmund et al., 2013, p. 385). For this research, 165 respondents will be selected from the general public who had attained the age of 18 years old and are licensed to drive in the selected environment and they will be the population of this research.

In deciding the sample size, a few factors surrounding this research are considered. First, the research objective of this research is to understand the factors related to haphazard parking in the chosen environment. Second, the population of this research is centered on 150 candidates from the selected township. Therefore, the stated factors affect how the sample size is chosen. Krejcie and Morgan (1970) developed a table that provides a good sample representation of a given population (Sekaran & Bougie, 2010). Based on the table, a population ($N$) of 250 requires a sample ($S$) of 148 responses for statistical evaluation. However, the sampling size will be increased by another 10% to anticipate for non-response rate as well as spoilt questionnaires. Therefore, the final sample size decided will be 165 responses.

For this research, the questionnaire survey was the method used in the primary data collection process as the research scope is confined locally on factors influencing haphazard parking with 165 respondents. The questionnaire was developed in English and printed and
distributed at a time when haphazard parking was becoming rampant such as during the lunchtime rush hour to the identified respondents and for immediate return. For respondents who may have challenges with the language of the questionnaires, and since it is a face-to-face approach, the objectives of the research were explained and guided in a language that can be easily understood such as Bahasa Malaysia. Prior to that, the researcher gave a simple briefing before the survey started in order to give better understanding to respondents to answer the questions.

The questionnaire to be used was divided into four sections. The first section covered respondents’ background such as age, education background, nature of work and years of driving experiences which is either academic or non-academic. In this section, the scale used will be a combination of nominal scale and ratio scale. In nominal scale, groups or categories are assigned such as category “male” or “female” in gender question. For ratio scale, it has a unique zero origin and can measure the differences between points on a scale and its proportions (Sekaran & Bougie, 2010). Example is the question “how many years of driving experiences?” The response to this question can range from 1 to any reasonable figure. The second section will gauge respondents’ responses on factors influencing haphazard parking. The type of scale used will be a 5-point Likert scale where 1 denotes “strongly disagree” while 5 is “strongly agree”.

The Likert Scale is an ordinal psychometric measurement of attitude, beliefs and opinions. In each question, a statement is presented in which a respondent must indicate a degree of agreement or disagreement (Lamarca, 2011). There will be ten questions in this section to gauge respondents as motorists. This is followed by the second section, which will gauge respondents’ responses on authority enforcement and factors that cause haphazard parking. In this section, there will also be ten questions where each question response is set against a 5-point Likert scale used similarly in the first section. The third section gauged respondents’ responses on parking bays, facilities and related factors that cause haphazard parking. Again this section used the same rating of 5-point Likert scale with another ten questions. The final section is the dependant variable established with nine (9) questions and each required response is also set against the Likert scale.

However, the disadvantage of Likert Scale questions is that they are uni-dimensional because they are provided a certain number of choices which would imply the space between each possibility is equidistant, which is not true in real life. And it affected the result; a true attitude is not actually measured (Smart Survey, 2013). Normally, the previous questions will have an influence on responses to any subsequent questions. It is also normal for respondents to have the tendency to automatically avoid the “extremes”, and to answer with what was expected.

To ensure validity, first, the questionnaire’s content will be validated through an external party that will help to address the construct validity and criterion-related validity. Construct validity refers to the instrument ability to tap on the concept as theorized. Criterion-related validity refers to the instrument ability to differentiate individual on criterion it is expected to predict (Sekaran & Bougie, 2010). Thereafter, there will be five selected individuals will go through face validity where the questionnaires will be pretested. Pretesting helps the
researcher to ensure that the respondents understand the questions and to obtain any feedback to rectify any inadequacies, ambiguity or biasness. It is important to pretest and pilot test to identify questions that do not make sense to participants or identify problems with the questionnaire that might lead to biased answers. In addition, reliability test is a crucial step before conducting hypothesis testing. The most commonly used to measure the internal reliability of factors is Cronbach’s alpha, noted by Sekaran (2003). The measure's dependability is built up by testing for both consistency and stability. Consistency demonstrates how well the things measuring an idea hangs together as a set. Cronbach’s alpha is a reliability coefficient indicating how well the items in a set are positively correlated to one another. Cronbach’s alpha was computed in terms of the average inter-correlations among the items measuring the concept. The range score of Cronbach’s alpha lies between 0 and 1. It means that, if the coefficient alpha score is closer to 1.0, items are consistently reliable. For this research, in order to ensure reliability, a pilot test was carried out in which the researcher sent out questionnaires to 30 respondents. With the responses obtained during the pilot test, a reliability test was conducted to ensure that the Cronbach’s alpha value of the instrument is above .7 (Sekaran, 2003).

In carrying out this research and since it will be conducted in the public place, first, the researcher will approach an individual or group and explain the objective and purpose of the research in order to gain respondents’ confidence, trust, and willingness to participate in the research voluntarily. Upon getting respondents’ verbal consent, the researcher will assure respondents that their identity will be anonymous and the information provided from them will remain confidential in order to keep them away from harm when the general findings from the research are revealed. During the data collection, the researcher carried out this process in good faith assuming that the respondents are answering the questionnaire in an honest and unbiased manner. When the completed questionnaires were analyzed, the researcher clarified, confirmed and summarized the findings to discern what the results lead to. Finally, the presentation of the data and the writing of this research will observe ethical behavior in reporting what the general outcome indicates without the intention of plagiarism, fraud or deception.

Statistical analysis of data from the survey was accomplished by using Statistical Packages for the Social Sciences (SPSS) Version 21. The analytical techniques used to analyze the primary data collected from the distributed questionnaire were descriptive, univariate and multivariate statistical analysis. According to Zikmund et al. (2013), the most basic statistical analysis is descriptive analysis. Descriptive analysis refers to transformation of raw data into a form that describes basic characteristics such as central tendency (mean, median and mode), distribution (range, variance and standard deviation) and variability (univariate statistical analysis, bivariate statistical analysis and multivariate statistical analysis) (Zikmund et al., 2013, p. 484; Sekaran & Bougie, 2010). However, every time researchers try to describe a large set of observations with a single indicator they run the risk of distorting the original data or losing important details. Even given these limitations, descriptive statistics provide a powerful summary that may enable comparisons across people and other units (Trochim, 2006).

In the univariate statistical analysis, analysis is carried out involving only one variable.
For example, if the analysis variable is “education level”, the researcher will look at how many respondents fall into the given education level attribute categories. The purpose of univariate statistical analysis is to describe the pattern of the variable analyzed (Zikmund et al., 2013 p. 506). According to Zikmund et al. (2013) the bivariate statistical analysis involves two variables. The variable that is often denoted as X and Y will be analyzed to determine the empirical relationship between them. In order to see if the variables are related to one another, it is common to measure how those two variables simultaneously change together. Pearson correlational analysis is used to measure the relationship of these variables. It reveals the magnitude and direction of relationships (Sekaran & Bougie, 2010). Sekaran and Bougie (2010) also explain that Pearson correlational analysis is appropriate for interval- and ratio-scaled variables.

In multivariate statistical analysis the research involves three, or that is concerned with the underlying dimensions among variables will involve multivariate statically analysis. Multivariate statistical methods analyze multiple variables or even multiple sets of variables simultaneously (Zikmund et al., 2013, p. 583). According to Sekaran and Bougie (2010), multiple regression analysis is commonly used in multivariate statistical analysis. Sekaran and Bougie (2010) provide an objective means of assessing the degree and the character of relationship between independent variables and dependent variable. The regression coefficients indicate the relative importance of each independent variable in predicting the dependent variable. The regression coefficient is obtained by holding all other independent variables constant and it is not similar to simple regression coefficient which analyze how one independent variable affects the dependent variable (Sekaran & Bougie, 2010). With the Microsoft Excel, calculating correlation is probably easiest data to analyze and graphs and scatter plots with Excel function.

FINDINGS

Motorists’ Attitude Toward Parking Haphazardly

To be able to have a better understanding on motorist’s thinking and attitude pertaining to haphazard parking, it has been measured using 165 questionnaires based instruments that consist of 5-scale items (questions). Based on this 5-scale items and its cumulative score where the minimum score is 1 while the highest is 5. In this component, ten (10) questions are formulated requiring the respondents to answer the question on a 5-scale summary measure of perceptions.

When questions were posed if they always parked haphazardly, 47.9% strongly disagreed with the statement while 4.8% strongly agreed that it is common for them to park haphazardly. On the time saving statement, 40% strongly disagreed as a convenient approach while 6.1% did that to speed-up their activities. Majority of the respondents (62.4%) were concerned that their cars may be damaged through haphazard parking while the accumulated ratings on agreed and strongly agreed that equals to 17% have no worries if their cars were damaged because of their own haphazard parking.

Out of 165 respondents, 67.3% who strongly disagreed feels that other car owners will be offended if they are being blocked and only a minority with accumulated percentage of 7.8% agreed and strongly agreed that the other party would be understanding and will not be upset...
with them, perhaps with the assumption that Malaysians are generally accommodating and forgiving. Similarly, the question on whether the motorist will feel bad when others got annoyed with them, majority of them representing 61.8% strongly agreed that they will feel bad while an accumulated 6.7% of respondents have no feeling about it. Some 46.7% percent strongly disagreed that haphazard parking is a strategy to take over someone’s parking lot while 8.5% thought and strongly agreed that it can be an attempt and priority to gain a parking spot.

However, the combined respondents who rated agree and strongly agreed with a total of 61.2% wanted to enjoy free parking and 23.7% consist of those who rated strongly disagreed and disagreed that haphazard parking as an advantage not to pay for parking. Interestingly, there is a combined response of 40.0% for those rated strongly disagreed and disagreed for even parking haphazardly for a short duration which is quite closed to the combination of those who agreed and strongly agreed that short duration is alright with 36.4% suggesting. On parking haphazardly for a long duration, majority consists of 65.5% who strongly disagreed and only 3.6% who strongly agreed. As a conclusion to this descriptive analysis of motorist attitude, 29.4% strongly disagreed that haphazard parking as a way to monitor their car while 7.9% strongly agreed that it is a good method, more so with rampant crime and car break-ins that made vehicle owners extra cautious over their properties.

**Table 1: Motorists’ Attitude Towards Parking Haphazardly (N=165)**

<table>
<thead>
<tr>
<th>NO</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I always parked haphazardly</td>
<td>1.90</td>
<td>1.12</td>
</tr>
<tr>
<td>2</td>
<td>I find it time saving to park haphazardly</td>
<td>2.36</td>
<td>1.32</td>
</tr>
<tr>
<td>3</td>
<td>I am not worried other vehicle will damage my car</td>
<td>1.87</td>
<td>1.36</td>
</tr>
<tr>
<td>4</td>
<td>I assume no one get offended when I blocked their car</td>
<td>1.60</td>
<td>1.06</td>
</tr>
<tr>
<td>5</td>
<td>I will not feel bad when others got annoyed with me</td>
<td>1.68</td>
<td>1.08</td>
</tr>
<tr>
<td>6</td>
<td>Parking haphazardly is a strategy to take over someone’s parking lot</td>
<td>2.15</td>
<td>1.36</td>
</tr>
<tr>
<td>7</td>
<td>I want to enjoy free parking</td>
<td>3.64</td>
<td>1.49</td>
</tr>
<tr>
<td>8</td>
<td>I park haphazardly for short duration</td>
<td>2.79</td>
<td>1.28</td>
</tr>
<tr>
<td>9</td>
<td>I park haphazardly for long duration</td>
<td>1.58</td>
<td>0.98</td>
</tr>
<tr>
<td>10</td>
<td>I park haphazardly so that I can see my car</td>
<td>2.25</td>
<td>1.31</td>
</tr>
</tbody>
</table>

*Notes: 1=Strongly Disagree, 2=Disagree, 3=Slightly Agree, 4=Agree, 5=Strongly Agree, SD=Standard Deviation*
Enforcement Toward Haphazard Parking

In this component, another ten (10) questions are formulated requiring the respondents to answer the question on a five-scale summary measure of perceptions. The findings of this study suggest that 54.5% of the respondents indicated that haphazard parking is against the law while 6.1% strongly agreed that there is nothing wrong with haphazard parking, perhaps with the understanding that it is common in most places. With regard to the unavailability of proper warning signage, those who rated from slightly agreed to strongly agreed comprises of 58.8% while 41.2% found that the absence of the warning signage was irrelevant.

Majority of the respondents agreed that there was no enforcement carried out by the relevant authorities for haphazard parking that leads to the current situation with 71.5% on those who strongly disagreed and disagreed against 28.6% who thought otherwise. Respondents also agreed that there was weakness in the enforcement because it was carried out on certain timing instead of randomly with 82.5% agreed and only a minority of 17.5% disagreed. Similarly, 74.5% of the respondents also agreed that the authorities were focusing more on other traffic offences with 25.4% in disagreement.

The results had shown that 37.6% responded that they strongly disagreed in ignoring paying summons while 9.7% responded that it is all right to do so. Perhaps with the previous experiences where offenders are given discount for their summons, majority of the respondents with the combined rating of 60.6% are agreeable that they enjoy discount for summons while 10.6% strongly disagreed that offering discount is a good approach by the relevant authorities. Meanwhile, the assumption that summonses will be cancelled after the issuance, 32.7% strongly disagreed while 10.3% strongly agreed, perhaps with what the authorities had done previously in ‘cleaning-up’ their long overdue databases that makes their record disappear.

On the questions regarding the assumption that summonses will not affect any road-tax and driving license renewal and the deduction of merit points, the responses for both questions were quite similar with 34.5% strongly disagreed that summonses will not affect the road-tax and driving license renewal while 10.9% strongly agreed that it will and 30.9% strongly disagreed that it will not affect any merit points and 10.9% strongly agreed that it will too. This could be due to majority of the respondents being aware of JPJ procedures and rulings.
Table 2: Enforcement Towards Haphazard Parking (N=165)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Is not wrong to park haphazardly</td>
<td>1.88</td>
<td>1.20</td>
</tr>
<tr>
<td>2.</td>
<td>There is no signage as warning</td>
<td>2.76</td>
<td>1.34</td>
</tr>
<tr>
<td>3.</td>
<td>There is no enforcement on haphazard parking</td>
<td>3.27</td>
<td>1.36</td>
</tr>
<tr>
<td>4.</td>
<td>Enforcement officers normally comes at certain time</td>
<td>3.62</td>
<td>1.20</td>
</tr>
<tr>
<td>5.</td>
<td>Authorities focus on other offences</td>
<td>3.32</td>
<td>1.28</td>
</tr>
<tr>
<td>6.</td>
<td>I ignore paying summonses</td>
<td>2.33</td>
<td>1.33</td>
</tr>
<tr>
<td>7.</td>
<td>I enjoy discount for summonses</td>
<td>3.62</td>
<td>1.32</td>
</tr>
<tr>
<td>8.</td>
<td>I assume summonses will be cancelled</td>
<td>2.43</td>
<td>1.34</td>
</tr>
<tr>
<td>9.</td>
<td>I assume summonses will not affect my road-tax and license renewal</td>
<td>2.41</td>
<td>1.36</td>
</tr>
<tr>
<td>10.</td>
<td>I assume summonses will not affect my merit points</td>
<td>2.51</td>
<td>1.34</td>
</tr>
</tbody>
</table>

*Notes: 1=Strongly Disagree, 2=Disagree, 3=Slightly Agree, 4=Agree, 5=Strongly Agree, SD=Standard Deviation

Parking Bays Friendliness

From the findings gathered from the 165 respondents, the results indicated that 58.2% strongly agreed that there were not enough of parking bays especially in highly active commercial areas with only 2.4% respondents that perceived otherwise with strong disagreement. Majority of the respondents agreed that the available parking bays were a distance from their intended destination, thus leading them to park haphazardly with 63.6% derived from the agreed and strongly agreed responses and 3.0% strongly disagreed.

Parking bays condition was a major concern with 60.6% agreed that they were not well maintained while 3.0% of respondents strongly disagreed. From the 165 respondents, 57% agreed that parking bays were not women friendly, which could be contributed by the majority of the female responders or by male respondents who had similar experiences while 4.8% strongly disagreed. Questions on the inconvenience of parking bays to the disabled and the elderly were also posed, with the majority in agreement (61.2% and 70.9% respectively) while those who strongly disagreed contributed 4.8% and 4.2% respectively.

On the safety aspect of multi-storey car parking facilities, 34.5% rated it as slightly agreed while 7.9% strongly disagreed that multi-storey car park was unsafe. Parking fee concern was raised as a question to determine whether it contributed to haphazard parking with 46.1% strongly agreed and 3.0% strongly disagreed and indicated it was not relevant. At the same time majority of the respondents agreed that the parking fee charged does not match
the service level provided where 72.2% were in agreement with only 2.4% strongly disagreed. As a conclusion to this descriptive analysis, the majority of the respondents were in agreement that the current parking bays were unsuitable for larger size vehicle where 54.6% ranging from agreed to strongly agreed while 2.4% strongly disagreed.

### Table 3: Parking Bays Friendliness (N=165)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Not enough parking bays</td>
<td>4.32</td>
<td>1.00</td>
</tr>
<tr>
<td>2.</td>
<td>Parking bays are far away</td>
<td>3.76</td>
<td>1.04</td>
</tr>
<tr>
<td>3.</td>
<td>Parking bays are not well maintained</td>
<td>3.80</td>
<td>1.06</td>
</tr>
<tr>
<td>4.</td>
<td>Parking bays are not women friendly</td>
<td>3.67</td>
<td>1.11</td>
</tr>
<tr>
<td>5.</td>
<td>Parking bays are not convenient for disabled</td>
<td>3.70</td>
<td>1.13</td>
</tr>
<tr>
<td>6.</td>
<td>Parking bays are not convenient for elderly person</td>
<td>3.88</td>
<td>1.06</td>
</tr>
<tr>
<td>7.</td>
<td>It is not safe to park at a multi-storey car park</td>
<td>3.27</td>
<td>1.16</td>
</tr>
<tr>
<td>8.</td>
<td>Parking fee is expensive</td>
<td>4.05</td>
<td>1.06</td>
</tr>
<tr>
<td>9.</td>
<td>Parking fee does not match service level</td>
<td>3.99</td>
<td>0.99</td>
</tr>
<tr>
<td>10.</td>
<td>Parking bay not suitable for larger vehicles</td>
<td>3.68</td>
<td>1.01</td>
</tr>
</tbody>
</table>

*Notes: 1=Strongly Disagree, 2=Disagree, 3=Slightly Agree, 4=Agree, 5=Strongly Agree, SD=Standard Deviation*

**Ways to Control Haphazard Parking**

The study found that 93.3% of the respondents agreed that haphazard parking was a common situation while the minority equivalent to 6.7% thought otherwise. Indeed, the majority of the respondents, 61.8% also perceived that haphazard parking was not controllable with 3.6% responding that was not the case. At the same time, 75.2% suggested that a stricter law should be in place to deal with the situation and offenders while 5.4% disagreed and perceived it is not necessary to do so.

Most of the respondents felt it was necessary to impose heavier penalty for haphazard parking offenders with a combined 66.7% in agreement while 8.5% disagreed. The proposed single lane driveway as a solution to haphazard parking was posed with 37.6% slightly agreed, 21.8% agreed and 23.6% strongly agreed while 0.6% strongly disagreed. An efficient public transport system to counter haphazard parking was strongly agreed by 41.8% and only 0.6% strongly disagreed that public transport system was a solution to haphazard parking.

Proposed Jockey service as an option to minimize haphazard parking drew 53.3% of agreed and strongly agreed respondents with only 2.4% strongly disagreed that this can be a
solution; perhaps the thought of extra cost was perceived. With the proposed restricted drive-time as the final option in this section, 31.5% slightly agreed, 21.8% agreed and 23.6% strongly agreed while 4.8% strongly disagreed that this can be used effectively to counter haphazard parking. Finally, the requirement of a safe and secured car park drew 30.3% who agreed and 46.1% that strongly agreed and 1.2% and 4.2% who strongly disagreed and disagreed respectively. Perhaps the minority feedback could be contributed by their personal experiences that the places that they normally parked were safe and pleasant, particularly from the security aspect.

<table>
<thead>
<tr>
<th>No</th>
<th>Ways to control Haphazard Parking (N=165)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Haphazard parking is common</td>
<td>4.06</td>
<td>0.95</td>
</tr>
<tr>
<td>2.</td>
<td>Haphazard parking is not controllable</td>
<td>3.79</td>
<td>1.17</td>
</tr>
<tr>
<td>3.</td>
<td>Haphazard parking needs stricter law</td>
<td>4.16</td>
<td>0.94</td>
</tr>
<tr>
<td>4.</td>
<td>There should be a heavier penalty for haphazard parking offender</td>
<td>3.96</td>
<td>0.99</td>
</tr>
<tr>
<td>5.</td>
<td>Single lane driveway will help to minimize haphazard parking</td>
<td>3.52</td>
<td>1.05</td>
</tr>
<tr>
<td>6.</td>
<td>Public transport efficiency will help to minimize haphazard parking</td>
<td>4.05</td>
<td>0.98</td>
</tr>
<tr>
<td>7.</td>
<td>Jockey service will help to minimize haphazard parking</td>
<td>3.61</td>
<td>1.07</td>
</tr>
<tr>
<td>8.</td>
<td>Restricted drive-time hour will help to minimize haphazard parking</td>
<td>3.41</td>
<td>1.17</td>
</tr>
<tr>
<td>9.</td>
<td>Safe and secured car park will help to minimize haphazard parking</td>
<td>4.16</td>
<td>0.95</td>
</tr>
</tbody>
</table>

*Notes: 1=Strongly Disagree, 2=Disagree, 3=Sligltly Agree, 4=Agree, 5=Strongly Agree, SD=Standard Deviation*

**Relationship Between Motorist Attitude, Haphazard Parking Enforcement, Parking Bays and Facilities Friendliness with Haphazard Parking Control**

Correlation analysis was used to measure the relationship between two or more variables. Pearson correlation analysis has been used to get significant relationship between all variables in this study. This analysis has been done to determine the relationship between motorist attitude, enforcement, parking bays friendliness and haphazard parking.

Pearson Correlation values ($r$) as indicated in the following tables show the relationship
level between motorists’ attitudes, enforcement, parking bays friendliness and haphazard parking. If Pearson Correlation value ($r$) is bigger, this shows that there is strong relationship between motorist attitudes, enforcement, parking bays friendliness and Haphazard Parking. The guideline to interpret the correlation coefficients ($r$) strength is based on Pearson’s Correlation coefficient ($r$) used by Hopkins (1997) in Table 5.

<table>
<thead>
<tr>
<th>Pearson Correlation ($r$)</th>
<th>Indication of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>.90 to 1.00</td>
<td>Infinity</td>
</tr>
<tr>
<td>.70 to .90</td>
<td>Strongly High Correlation</td>
</tr>
<tr>
<td>.50 to .70</td>
<td>High Correlation</td>
</tr>
<tr>
<td>.30 to .50</td>
<td>Moderate Correlation</td>
</tr>
<tr>
<td>.10 to .30</td>
<td>Low Correlation</td>
</tr>
<tr>
<td>.00 to .10</td>
<td>Strongly Low Correlation</td>
</tr>
</tbody>
</table>

Table 5: Pearson’s Indication of Correlation

Relationship Between Motorist attitudes and Haphazard Parking

It has been analyzed but the results shows that there is no positive significant relationship between motorists’ attitudes and haphazard parking. From the Pearson Correlation coefficient, it is found that motorist and haphazard parking is strongly low and negligible and insignificant where $r = -0.083$ and $p = 0.289$. The insignificant finding of a relationship between motorists attitude and haphazard parking could be because haphazard parking was only practiced by a small group of habitual motorists in general.

Table 6 : Pearson’s Correlation ($r$) of the relationship between Motorist and Haphazard Parking

<table>
<thead>
<tr>
<th>Haphazard Parking (HP)</th>
<th>Motorist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>-0.083</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.289</td>
</tr>
<tr>
<td>N</td>
<td>165</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
Relationship Between Enforcement Factors and Haphazard Parking

There is no positive significant relationship between enforcement and haphazard parking. Pearson Correlation coefficient for two variables which are enforcement and haphazard parking is lowly correlated where \( r = 0.101 \) and \( p = 0.199 \). The study reviewed that the lack of enforcement activities and motorist not abiding to the law and traffic rules are not the main factors influencing haphazard parking.

Table 7 : Pearson’s Correlation (r) of the relationship between Enforcement and Haphazard Parking

<table>
<thead>
<tr>
<th></th>
<th>Enforcement</th>
<th>Haphazard Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.101</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.199</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>165</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

Relationship Between Parking Bays and Haphazard Parking

From the study, the result shown that there is a positive significant relationship between parking bays and haphazard parking. From the Pearson Correlation coefficient, it is found that parking bays and haphazard parking is moderately correlated where \( r = 0.393 \) and \( p = 0.000 \). Pearson Correlation coefficient \( (r = 0.393) \) show that there is a linear relationship between those two variables and the relationship is positively significant the haphazard parking situation. This finding also shows that there is significant relationship between parking bays and haphazard parking where its significant value is 0.000. This value is smaller than alpha value that has been setup \( (p= 0.05) \).

Table 8 : Pearson’s Correlation (r) of the relationship between Parking Bays and Haphazard Parking

<table>
<thead>
<tr>
<th></th>
<th>Parking Bays</th>
<th>Haphazard Parking (HP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.393</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>165</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

CONCLUSION

The majority of the research respondents that were conducted among the general
public with contribution from both female (N=86) and male (N=79). Most of their age group is within 21-25 years old (N=66), followed by respondent age within 26 – 30 (N=23) while only four of the respondents are above 56 years old. Furthermore, the research also found it very much relevant with the age group to determine those who are behaved inconsiderately while driving. Majority of the respondents have an average of at least five (5) years of driving experience and most of the respondents are vehicle owners while only a small group of respondents do not own one. Majority of the respondents are private sector employees; five respondents were public sector employees.

Due to the concern of uncontrollable haphazard parking and issues that may be prolonged, it is important to study the factors that contribute positively to it. The framework of this study claimed that not all three aforementioned independent variables namely motorist factors, enforcement factors and parking bays factors were components of haphazard parking except on the independent variables related to parking bays. The results from this study have led to conclusions and recommendations to improve haphazard parking in the Klang Valley.

This research which involves the general public to feedback and to gauge their opinion on haphazard parking situation was well responded and respondents were highly encouraged with the area of research. In general, most of the respondents’ feedback was that the research is timely in view of the current haphazard parking that contributed to the congested traffic situation especially within a new or vibrant township in the Klang Valley of Malaysia. Apart from it being a timely research, the majority of the respondents prefer not to pay for parking or there must be justification between parking fees imposed and standard level of service provided.

This study has confirmed that insufficient parking bay is the main cause of uncontrollable haphazard parking. Therefore, it is suggested that parking bays planning policies are imposed, parking bay facilities and management are reviewed and improved. First, parking bay planning policies – according to Traffic consultant Dr. Rosli Azad Khan from MDS Consultancy (MDS, 2011), “the current policy imposed by the Majlis Bandaraya Petaling Jaya (MBPJ) needed to be reviewed because it was already 10 years old. Local authorities have their own set of traffic requirements imposed on developers even though they follow the general guidelines set by the Town and Country Planning Department. However, the requirements are lax in several ways, this is where the system fails”. According to MBPJ’s planning approval for car parking bays provision, its current requirement is one (1) parking bay for every 46.4sq m of retail and office space (MDS, 2011) and it is recommended that the town-planning department to re-study the requirements whether it is still relevant and practical with the increase vehicles on the road. While it can be a disadvantage to property developers since it could be a waste of land space or incurring additional cost and lower their profit margin, it is recommended that the local government must be objective driven and forward thinking to ensure that the planning approval meets the future demand so that parking spaces are ample and sufficient to cater to the commercial needs of the environment. The writer believes with changes in the requirement, it will be helpful to reduce haphazard parking.

Second, current parking bay conditions – one of the findings that indicates majority of the respondents are agreeable is that the local government owned multi-storey public car park
environment is unsafe and unfriendly especially to lady drivers. One cannot help but have goose bumps using some of the dark and quiet stairways that makes many turn-away from the under used parking bays. It is highly recommended that the local government seriously look into its condition instead of leaving it unattended and with low maintenance effort. The situation could be improved by placing security personnel and to maintain and energize the lighting to make it brighter and more welcoming to the car park users. Incorporating closed-circuit television to give better security and safety comfort to the public will definitely increase usage even of higher levels. When there is an initiative for improvement and the general public feel comfortable with it, the writer is confident that it will draw crowds to park there. Third and finally, parking bay management – most of the local government owned multi-storey car parks are not professionally managed and most of the time it is by their own in-house employees. Common situation of pilferage and lack of control and enforcement may be an added disadvantage to the local government. When professionalism is not incorporated, scenario such as over-charging may occur and it may turn out to be a threat to potential users. In order to make it effective and turn it into an income generating asset, the local government should consider to lease out or to outsource the car park management to experienced industry players whose main objective is to maximize revenue and profit margin; hence they will put in extra effort to maximize the car park usage or turn-over through implementing marketing activities and offering unique parking rates to attract the public to park with them. While it will become a consistent income to the local government based on the above commercial approach, general up-keeping and maintenance of the premise should not be an issue since there are funds available for spending.

Nonetheless, with the acceptance of the above recommendations, it cannot be discounted that motorist’s attitude could also play a major part in contributing to the chaotic situation such as poor driving habit as one reason that causes other motorist to be unhappy on the road since it will stress out others and drivers will get angry no matter how comfortable or feature filled vehicle one is driving when encountering haphazard parking situation. Those with bad driving skills will cause other motorists to drive badly too and where safety will take a back seat. From the authority point of view, it was said many motorists need an attitude overhaul and this can be true as it is observed the current chaotic situation was contributed by motorists with “couldn’t care less” attitude.

Generally, motorist will avoid going against the law whenever there is a presence of enforcement officers and motorist will do whatever possible to avoid being compounded. The Malaysian Institute of Road Safety Research (MIROS) in their research has suggested that “to look into the effectiveness of both the overt and covert approaches in influencing road users’ perceived risk of detection. Examples of overt enforcement in Malaysia are police-manned observation towers, police patrols, placing police cut-outs (dummies) in haphazard parking-prone areas, roadblocks, enforcement cameras and signs warning of police presence along the roads” (MIROS, 2012) which will help to deter haphazard parking or any unnecessary traffic obstructions.

When the relevant authorities and the general public have the knowledge about the seriousness of haphazard parking and how it creates inconvenience to others, motorists may
become more responsive and will change their attitude and approach haphazard parking with a
different point of view. This will be an advantage to the local government since there will be
less effort for the enforcement team in handling traffic issues and congestion contributed by
haphazard parking and the enforcers are able to concentrate on other enforcement tasks or
offences to achieve their organizational goals of a pleasant and efficient parking and traffic
environment.

This research also shows the respondents are satisfied with the research effort and the
questionnaires presented were considered relevant in this context. Conversely, this research
also recognized that the respondents do not always feel secure with the public car parks and
facilities and mostly agreed that car parks need enhancement, better security features and be
more user-friendly.

With regard to the overall contribution of this research to the literature, though it has a
low significance, it has managed to further extend and strengthen the theoretical discourse on
the behavioristic features of human beings who chose to disrespect the law when the situation
warrants a quick solution. In other words, this study shows the essence and strength of the
relationship between parking bays and haphazard parking. Thus, this study can expand the
knowledge that is now available. Other people can make this study as reference in their future
research or just to know the findings about the relationship between motorists, enforcement
and parking bays and facilities and haphazard parking.

In terms of the relevant authorities who are in a position to make policies especially in
town and development planning, the findings from this study could help policy makers in giving
more attention or priority in the area of ratio and design of car parking bays and facilities. For
every example, whenever there is a submission for a new property development, the relevant
authorities must re-work on the ratio of built-up space and parking bay requirements since the
current formula may not be realistic anymore. The relevant authorities, upon obtaining the
results of this study, could consider using this study as a reference and guideline to proceed
with changes to the current policy, wherever applicable.

Before the study, the perception may have pointed to the motorist attitude and law
enforcers’ inefficiency as the main issues that needed to be addressed but were not significant.
Therefore, this research can improve the town planner’s policy which can be widely used to
create new policies, development rules and procedures or adjust the existing policy or rules and
procedures.

From the practical aspect, the findings from the research have contributed a new insight
to town planning in terms of providing valuable input and awareness of the factors or variables
to consider in addressing haphazard parking. The research illustrates with empirical evidence
that it is vital for the authorities to relook into the needs and future requirements. In other
words, the relevant authorities need to improve their research and development to ensure
haphazard parking is a thing of the past. The results of this study also add to the importance of
minimizing haphazard parking. In short, the findings from this study have not only contributed
to the body of knowledge or literature on the subject or issue of the relationship between
motorist, enforcement, parking bays and haphazard parking, but it also provides vital
information to both policy makers and practitioners on the subject matter.
Limitation and recommendation for further research

The main focus of this study is to validate haphazard parking situation in a selected environment by verifying the three chosen factors contributing to it, namely, motorist, enforcement and parking bays and facilities. Besides verifying the relationship of the three factors to haphazard parking, this study also attempts to understand the most significant factor contributing to haphazard parking within this chosen environment for the research work. Thus, the unit of measurement in this studied sample is focusing on the community within the environment. Therefore, the first limitation of this study is that the findings are generalized to the selected community even though there is a breakdown to subgroups such as gender, age or other demographic attributes that may deemed significant in moderating the relationship. Future research should be expanded to demographic subgroups and to study if the chosen demographic attributes will affect the relationship differently such as academic background and actual occupation.

Secondly, due to cost and time constraint, this study is carried out in a cross sectional manner. Cross sectional study refers to data that is collected at a single point of time or “taking a snapshot of the current situation” (Zikmund et al., 2013, p. 195). The limitation of such data collection is the occurrence of recency bias. This refers to a situation where respondents will provide survey feedback based on their most recent or current experience. Because of this, the respondent’s positive and negative experience recalled recently will impair the quality of the data as it may not be a true reflection of his or her general experience. In order to get a better understanding of this studied area, it is recommended that a follow-up cross-sectional research to be conducted for comparison or to carry out longitudinal studies where the same group of respondents are questioned at different points in time (Zikmund et al., 2013). Only then can the causal relationship be determined correctly.

Finally, the findings from this study were gathered from a small sample of 165 respondents in a chosen township in the Klang Valley of Malaysia. The demographics of the respondents in the said township may have limitation and may not be relevant. Half of the respondents selected are below 30 years of age and in order not to be seen as law defaulters, the respondents’ feedback may not be an entirely true indication on the behavior portrayed. At a macro level, the findings in this study cannot be generalized to other townships with a similar chaotic traffic environment. Furthermore, the cultural demographics criteria may be different in a more matured community or economic differences among different township may have moderating effect on this studied area.

Nevertheless, the above mentioned limitations suggest that future researches can be conducted on expanded subgroups as reported earlier, samples gathering to be expanded to different township and community or to compare with different states in Malaysia having similar unresolved situation.

REFERENCES


