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HAZARD PERCEPTION AND DEMAND FOR INSURANCE AMONG SELECTED MOTORCYCLISTS IN LAGOS, NIGERIA

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Abstract

This study examines hazard perception effects on the demand for insurance with special focus on motorcycle riders in Lagos state. For this purpose, the researchers have been able to examine selected hazard perception determinants and their effects on the insuring attitude and desire of motorcycle riders. An explanatory research design was employed and a convenience sampling type of the non-probability sampling technique was adopted. Data was gathered by interviews conducted at motorcycle parks along the Lagos-Badagry expressway. The sample consisted of 126 respondents made up of commercial motorcycle riders within the sample areas. Data collected was analysed using multiple regression technique. The study was able to establish some level of contributory linkage between hazard perception and demand for motorcycle insurance. The findings show that while dread and trust both appeared to have significant effect, publicity and controllability both have positive contributory effect; furthermore, choice expressed an inverse relationship with demand for insurance among the motorcycle riders. The study therefore recommends pre-loss and post-loss measures among the motorcycle riders so that unforeseen motorcycle risks can be managed. Also, insurance companies should endeavour to invest more on enlightening the motorcycle riders in order to lessen their dread of loss outcome, and thus, design policy that can instil trust in motorcycle riders in insurance as a loss control measure.

Keywords: Hazard, hazard perception, demand for insurance, motorcycle riders, Nigeria

Abstrak

Studi ini mengkaji dampak persepsi bahaya terhadap permintaan asuransi dengan fokus khusus pada pengendara motor di negara bagian Lagos. Desain penelitian explanatori digunakan melalui teknik sampling convenience. Data dikumpulkan melalui wawancara yang dilakukan di di sepanjang jalan tol Lagos-Badagry. Sampel terdiri dari 126 responden terdiri dari pengendara motor komersial. Data yang terkumpul dianalisis dengan teknik regresi berganda. Penelitian ini menunjukkan bahwa selain ketakutan dan kepercayaan, , publisitas dan pengendalian juga berpengaruh positif terhadap permintaan asuransi. Selanjutnya, pilihan yang

ada ternyata berhubungan negative dengan permintaan asuransi di antara pengendara sepeda motor. Studi ini merekomendasikan langkah-langkah pra-rugi dan pasca-rugi di antara pengendara sepeda motor sehingga risiko motor yang tak terduga dapat dikelola.

Kata kunci: Bahaya, persepsi bahaya, permintaan asuransi, pengendara motor, Nigeria

Motorcycles are a significant transportation means on the continents of Asia and Africa. Several studies conducted in some selected Asian countries (such as Taiwan, Singapore, Vietnam, Malaysia, among others) revealed that road traffic crashes involving motorcyclists account for about 66% of the total crashes in Taiwan, 16.3% in Singapore, more than 90% in Vietnam and about 50% in Malaysia (Haque, Chin & Debnath, 2012; Hsu, Ahmed-Farhan, & Ngugen, 2003). The Singapore Police Force (2008) gave a report of a high representation in motorcycle road traffic crashes responsible for about 33% of the comprehensive road traffic crashes, 48% of injured victims and 49% of road fatalities. On the African continent, a number of studies have shown that not less than 60% to 80% of injuries and deaths relating to road traffic crashes were a result of the activities of motorcyclists (Abdulgafoor, Pranali, Hadley, Stephen, Daniel, Jackim, Eric, William, & Kent, 2012; Agbonkhese, Yisa, Agbonkhese, Akanbi, Aka, & Mondigba, 2013; Kudebong, Wurapa, Nonvignon, Norman, Awoonor-Williams, & Aikins, 2011; Peltzer & Pengid, 2014; Solagberu, Ofoegbu, Nasir, Ogundipe, Adekanye, & Abdul-Rahman, 2006). According to Ofonime (2012), the most common road traffic crashes in Nigeria can be found among commercial motorcyclists. Arosanyin, Olowosulu, and Oyeyemi (2012) estimated the percentage share of motorcycles' involvement in road crashes between the year 2000 and 2009 at 26.24%

A number of risk factors have been identified with respect to motorcycle crashes on the road to include, among others: Speeding (Wisconsin, 2009; NHTSA, 2015); Poor road conditions (Aderinlewo & Ata, 2014; Othman, Thomson, & Lanner, 2009; Usman, 2014); Non-usage of helmet (French, Gumus, & Homer, 2009; Houston & Richardson, 2008; National Highway Traffic Safety Administration, 2014); and High-level alcohol consumption (Adisa, 2010; Makanjuola, Oyeleke, & Akande, 2007). According to NHTSA (2015), speed-related crashes among drivers are considered as offensive once the speed-limit has been violated. However, as cited in Ajemunigbohun and Oreshile (2014), inappropriate and excessive speed, high alcoholic consumption, and poor road design are factors influencing crash involvement and injury severity.

However, the various hazards motorcyclists are exposed to could be dependent on their level of perceptions to the direction at managing the risk element emanating from its occurrence. Evans and Macdonald (2002) described hazard perception as the process whereby a road user notices the presence of a hazard. In Haworth, Mulvihill and Symmons (2005), hazard perception

is seen as a skill connected with being able to identify potentially precarious traffic situations. Grayson, Maycock, Groeger, Hammond and Field (2003) earlier stipulated those motorcyclists' abilities to respond to risks emanating from their many activities to include: hazard detection, threat appraisal, action selection and implementing the necessary actions involved in the response that has been chosen.

Statement of Problem

In Nigeria, quite a number of studies have been conducted in a bid for finding solutions to the increasing rate of motorcycle accidents (Emejulu, Ekweogwu, & Nottidge, 2009; Ogunmodede, Adio, Ebijuwa, Oyetola, & Akintola, 2012; Ofonime, 2012; Salako, Abiodun, & Sholeye, 2013; Ndikom, Ndikom, & Uvere, 2014; Olakulehin, Adeoni, Oakanbi, Itie, Olanipekun, & Silori, 2015; Olusayo, Oyetunde, Okeibunor, Adedokun, & Adedeji, 2015). However, only a few, like Olowokudejo and Aduloju (2010), have given attention to motorcycle insurance. In such, certain factors have been identified as problems affecting hazard perception of motorcycle riders toward demand for insurance. However, studies such as [Schubert & Bruck, 2014; Schmidt, 2004; Slovic & Weber, 2002, Slovic, Fischhoff, & Lichtenstein, 1982] note that the factors that have been hypothesized to account for risk perceptions and attitude are: dread, controllability, publicity (knowledge), choices (voluntariness), and trust.

Perceived risk seems to be quantifiable and predictable in that laypeople's judgments of risks are affected by qualitative characteristics of these risks. The degree of perceived responsibility for one's own actions grows with the confidence that adverse effects can be influenced by human actions and dangers transformed into risks. Dohmen, Falk, Huffman, Sunde, Schupp, and Wagner (2010) observe that an individual's general attitude towards risk is also a strong predictor of risk-taking behavior in the real world. Identification of these factors, such as voluntariness, personal ability to influence risks, familiarity with the hazard, and catastrophic potential, provides useful information about the elements that individuals consider in constructing their interpretation of risks (Renn, O., Burns, W.J., Kasperson, J.X., Kasperson, R.E., & Slovic, P, 1992).

Aim and objectives of the study

The core aim of the study is to examine the effect of hazard perception on the demand for insurance among motorcycle riders in Lagos State. Other specific objectives are as follows:

i. To evaluate the effects of motorcyclists' dread on demand for insurance.
ii. To evaluate the effects of motorcyclists' controllability on demand for insurance.
iii. To evaluate the effects of motorcyclists' publicity on demand for insurance.
iv. To evaluate the effects of motorcyclists' choice on demand for insurance.
v. To evaluate the effects of motorcyclists' trust on the demand for insurance

Relevant research questions

In a bid to achieve the various objectives stated above, following are the relevant research questions:

i. Does motorcyclists' dread have any significant effects on insurance demand?

ii. Does motorcyclists' controllability have any significant effects on insurance demand?
iii. Does motorcyclists' publicity have any significant effects on insurance demand?
iv. Do motorcyclists' choices have any significant effects on insurance demand?
v. Does motorcyclists' trust have any significant effects on insurance demand?

Statement of the hypotheses

To provide answers to the questions highlighted above, the following testable hypothetical statements were considered:

H1: Motorcyclists' dread has no significant effects on demand for insurance
H2: Motorcyclists' controllability has no significant effects on demand for insurance
H3: Motorcyclists' publicity has no significant effects on demand for insurance
H4: Motorcyclists' choice has no significant effects on demand for insurance
H5: Motorcyclists' trust has no significant effect on demand for insurance

Conceptual and theoretical framework

A multidimensional definition of the concept of "hazard" has been provided by numerous scholars. Haworth and Mulvihill (2006) see hazard as any permanent or transitory, stationary or moving object in the road environment that has the potential to increase the risk of a crash. According to Vaughan and Vaughan (2008), hazard is a condition that may create or increase the chance of a loss arising from a given peril. Trieschmann, Hoyt, and Sommer (2005) earlier posited that hazard tends to make the loss more severe once the peril has occurred. Haworth, Mulvihill, Wallace, Symmons and Regan (2005) earlier came up with a working definition for hazard perception as "the process whereby the road user notices the presence of hazard." Smith, Horswill, Chamber and Wetton (2009a) described hazard perception as the first stage in responding to the presence of actual or potential hazards, with subsequent steps which involve decision about such hazard, and thus an appropriate response. An earlier contribution by Crick and McKenna (1992) defined hazard perception as the skill to identifying potentially harmful traffic situations. It is seen as a driver's ability to read the road and anticipate events that are forthcoming (McKenna, Horswill & Alexander, 2006)

However, crash risk occurrence has been interlinked with hazard perception (Horswill, Tarloy, Newnam, Wetton, & Hill, 2013; Jevtic, Vujanic, Lipovac, Jovanovic & Pesic, 2015; Rosenloom, Perlman & Pereg, 2011). The study of Haworth, Mulvihill and Symmons (2005) sees hazard perception as involving detection of stationary or moving objects on the road that have the potential to increasing the crash risk. Haworth and Mulvihill (2006) projected hazard perception as a predictor to crash risk. Being a predictor, crash risk patterns found in other road safety mechanisms have been mirrored via hazard perception test scores to measuring factors such as: driving experience level (Borowsky, Shinar & Oron-Gilad, 2010; Wetton, Horswill, Hatherly, Wood, Pachana, & Anstey, 2010; Scialfa, Deschenes, Ference, Boone, Horswill, & Wetton, 2011;

Wallis & Horswill, 2007); distraction (Reyes and Lee, 2008; Sagber and Bjornskan, 2006); sleepiness (Smith et al. 2009); traumatic brain injury (Preece, Horswill, & Geffen, 2011) and blood alcohol content (Liu, Liang, Rau, Hsu, & Hsieh, 2015).

Many studies in the past have underpinned the concept of "hazard perception" with respect to motorcycle riders and car drivers (Geoffrey, Crundall, & Chapman, 2011; Haworth, 2015; Smith, Horswill, Chamber, & Wetton, 2009b; Weissenfeld, Baldock & Hutchinson, 2013). Armsby, Boyle and Wright (1989) gave a report which distinguished motorcyclists' hazard from those of other motorists. It was further cited in the work of Haworth, Symmons, and Kowaldo (2000) that over 70% of the hazards mentioned by car drivers who had no motorcycle riding experience arose from the behavioural disposition of other road users, while car drivers who thus rode motorcycles were able to identify specific features of the road and specific actions of other road users as hazards to motorcyclists. While Elliott, Baughan and Sexton (2007) stated a preponderance of motorcycle riders at risk of being killed or injured in road accident than any other vehicle users' type, the study of Mayou and Byrant (2003) earlier stated a high risk of crash-related disability among motorcyclists.

According to some studies, the risk of a motorcyclist being involved in an accident hinges on factors such as the rider's age, sex, experience, type of road, characteristics of the motorcycle and the main causes of crashes (Bedard, Guyatt, Stones, & Hirdes, 2003; Chang & Yeh, 2006; Sexton, Flecter, & Hamilton, 2004b), as the risk assessment process is sometimes complicated by an existence of interaction between these factors and others (Sexton, Baughan, Elliott, & Maycock, 2004a). Liu, Hosking and Lenne (2009b) split motorcyclists' hazards into those involving the road surface (i.e., road-surface-based hazard) and those arising from the attitude of other road users. Andy, Terry and Hoe (2011) opine the need to identify specific features of the road (i.e., road surface and alignment) and detecting specific actions of other users on road that may be hazardous. While Quddus, Noland and Chin (2002) found that arbitrary increase in engine capacity, and collisions with pedestrians and with fixed objects escalate the tendency of severe injuries, Savolanien and Mannering (2007) supported the study of Deogratias, Vamsi and Peter (2011) that severe related injuries to motorcyclists include horizontal bends, darkness, vertical curves, unsafe speed, alcohol use and not wearing a helmet.

In line with risk factors for motorcyclists, Lin and Krans (2009a) suggested inexperience, excessive speed and risk-taking attitude, among others, as contributing human factors that increase the risk of accidents, especially those with high-severity injury outcomes. Evidence has shown that the underlying processes significant to safe driving is the ability to promptly detect potential hazards in order for the rider to react swiftly and effectively to avert crashes (Tagliabue & Sarlo, 2015; Vidotto, Bastianelli, Spoto, & Sergeys, 2011). Hazard detection, according to Hosking, Lin and Bayly (2010), is a function of responding appropriately to hazard and referred to as a crucial driving skill. However, enhanced deployment of overt attention

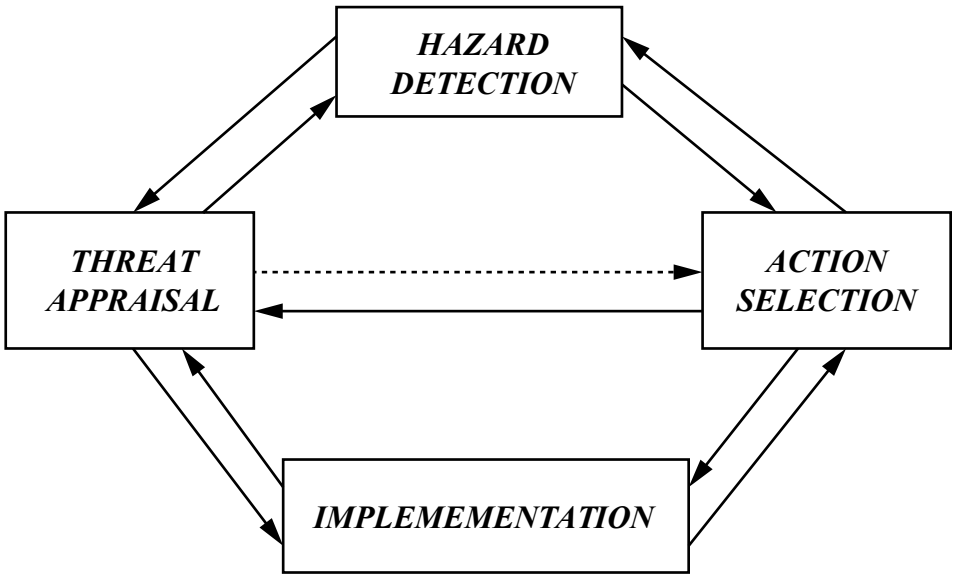

Figure 1. Model of Responding to Risk

is one factor underlying the swift hazard response times of experienced drivers (Underwood, 2007).

Source: Haworth (2015)

With respect to the above risk response model, concerted efforts have been made earlier in studies (such as Horswill & McKenna, 2004; Liu, et al., 2009b; Wallis & Horswill, 2007) to cushion the effect of hazard perception's experience of motorcyclists in consonance with the likelihood of having a crash. Hosking et al. (2010) conducted a study among three groups which include: experienced motorcyclists who were experienced motorists, inexperienced motorcyclists who were experienced motorists and inexperienced motorcyclists who were inexperienced motorists, to test the response techniques to hazard. In accordance with the study of Liu et al., (2009b) supported by the study of Shahar, Poulter, Clarke and Crundall (2010), it was found that experienced motorcycle riders have improved hazard perception and avoidance skills compared to inexperienced motorcycle riders when riding through numerous routes containing pre-specified hazards.

Slovic, Fischhoff, and Lichtenstein (1985) analyse the relationship between risk characteristics, perceived risk, and desired risk reduction. However, their findings reveal a huge impact of a risk's dread, stipulating that the higher a risk's scores, the higher the perceived risk, and the higher the desire for risk reduction. Sjoberg (1998) opines that the demand for risk reduction is significantly driven by the severity of consequences. Studies on the relationship between knowledge and risk perception are well established and documented in the risk perception literature (Boufajreldin, 2012; Horswill et al., 2013; Horswill, & McKenna, 2004). While an earlier study of Boholm (1998) hypothesised knowledge to mediate the relationship between hazards and perceptions of risk, Borowsky, Oron-Gilad, and Parmet (2010) gave a deeper examination of the effect of expertise

on conceptual knowledge and knowledge organization of hazards, as it may assist in designing specific computer-based traffic scenarios to bolster hazard perception skills among novice drivers.

Some extant literatures [such as Ericson, Kircher, Spinnerwijn, and Starc, 2016; Mendelsohn, and Gregory, 1993] contributed to the term "voluntariness." Ericson et al. (2016) said that the core challenge in making inference to risk perceptions and preferences from insurance choices is that both high-level risk and risk aversion increase the desire to buy insurance. Risk perceptions therefore affect both the insureds' willingness to pay for insurance and their risk exposure, which makes them central to the design of insurance contracts (Spinnerwijn, 2012). Perception of risk is weaker once the risk is chosen voluntarily, but amplified if it's imposed (Renn, 1992). Even though the risks might have similarities, the voluntarily chosen risk is more acceptable than the imposed. The lower a hazard's ratings on controllability, the more people may want to see its current risk reduced (Slovic, Fischhoff, & Lichtenstein, 1984).

Trust in experts and authorities is a factor which impacts significantly not only risk perception, but also preparedness measures that people take before natural hazards (Renn & Levine, 1991;
Wachinger, Renn, Begg & Kuhlicke, 2013). According to Bronfman, Lopez-Vazquez, Gutierrez, and Cifuentes (2008), trust is one of the variables that have the highest influence on risk perception and degree of acceptability. It has been demonstrated that people can feel at greater risk if their trust in experts and authorities is low, or if it has been damaged by the context in which they live (Bronfman, Cisternas, Lopez-Vazquer, & Cifuentes, 2016) Motorcycle is said to include any kind of cycle propelled mechanically. As cited in Aduloju (2008), a "motorcycle" is referred to as either a mechanically propelled, two-wheeled vehicle that may have a side car or trailer attached, or a three-wheeled vehicle that has two wheels on one axle where the centres of the points of contact of those wheels and the road are less than 46 centimeters. Daramola (2006) describes motorcycles to include tri-cycles, which could serve both private and commercial or pleasurable purposes.

Insurance, according to Oyetayo (2001), is described as a system of compensation for loss, damage, death and any other unexpected circumstances in return for periodic payment of a predetermined premium. Insurance is said to be a social device, in which a group of individuals (called "insureds") transfer risk to another party (called "insurers") in order to combine loss experience, which permits statistical prediction of losses and provides for payment of losses from funds contributed (premiums) by all members who transferred risk (Pritchett, Schmit, Doerpinghans & Athearn, 1996). Olsson (2002) stipulates that insurance will cover the financial consequences of any impact. According to Aduloju (2008), Ellis (1983), and Ellis & Mitchell (1990), the basic rating factors usually taken into account by insurers whenever a motorcycle insurance is provided include: proposer's age, proposer's experience, district, type of motorcycle, value of motorcycle, use of motorcycle, type of coverage and cubic capacity of the motorcycle.

The basic demand for insurance arises from the satisfaction that a consumer gains from the increase in financial security achieved by transferring the risk of loss to an insurer. Some major studies have been conducted with reference to insurance demand (Ajemunigbohun & Oreshile, 2014; Dragos, 2014; Hussels, Ward & Zurbruegg, 2005; Onafalujo, Abass & Dansu, 2011; Sehhat & Kalyani, 2011; Tooth, 2015;). Graven (2007) gave a demonstration of an insurance demand equation that explained four cases of logarithmic utility such as: effect of changes in wealth, effect of changes in the probability of loss, effect of changes in loss severity, and effect of changes in insurance premium. Insurance pricing, according to Nwankwo and Asokere (2010) is a combination of factors such as: adequacy, equity, reasonableness, induced loss prevention and technical profitability. While the study of Kiseok and Kang (2004) had explained adequacy as relation to the totality of an insurance company's premium portfolio, equity was explained in connection with individual premium of contract of insurance. Seog (2010) expresses that full insurance is easily purchased under an actuarially fair premium, while partial insurance occurs whenever there is an unfavourable premium.

However, several empirical studies (such as Beck & Webb, 2003; Browne, Chung, & Frees, 2000; Esho, Kirievsky, Ward, & Zurbruegg, 2004) have shown that the level of demand for insurance can be influenced by a great number of variables such as: political, legal, economic and social factors. An earlier study by Diacon (1983) mentioned factors affecting insurance demand to include: attitude towards risk and risk awareness, price of insurance, income and wealth, compulsory, and tax incentives. According to Nyce (2007), several factors affecting the demand for insurance are said to include: insurance mandates and regulation, risk tolerance, financial status, real services rendered, and tax incentives. However, the demand for insurance has been fundamentally misinterpreted as a demand for certainty; but in reality, the demand for insurance derives from a demand for an uncertain payoff of income or wealth (Nyman, 2001).

RESEARCH METHOD

The study made use of explanatory research design. The essence of the research design is to identify any causal link between the factors or variables that pertain to the research problems (Saunders, Lewis, & Thornhill, 2009). In pursuit of the research objectives, the research instrument used was a structured interview. This instrument was necessary because of its usefulness in gathering quantifiable data, as they are also referred to as quantifiable research interviews. The views of the respective participants to the understudied issues were coded to improve the completion of the interview schedule, which was drawn employing a Likert-type scale measurement of "Strongly agree," "Agree," "Undecided," "Disagree" and "Strongly disagree."

The research grounds for collection of data were the motorcycle parks along Lagos-Badagry expressway. The choice of these sample areas was due to ease in collection of data and a reasonable number of motorcycle parks on the road. This research employed a convenience sampling technique. In all, the motorcycle parks visited on the Lagos-Badagry expressway included: okokomaiko, iyana-iba, PPL, Volks, Army Barrack,

Alakija, Agboju, and Mile 2. The sample consisted of 126 respondents.

This study, however, takes cognisance of the validity of the research instrument, which comprises construct, content and predictive validity (Babbie, 2005). For construct validity, well-grounded literature were extensively used, while for content validity, academia and field experts in areas such transportation, insurance and risk management were requested to go through a draft of the interview schedule. They came up with cogent suggestions which improved the clarity of the instrument for better understanding of the respondents.

RESULT AND DISCUSSION

In an attempt to analyse the effect of hazard perception on demand for insurance among motorcycle riders, multiple regression technique was employed. The importance of multiple regression in this study is to determine how the exploratory variables (X1 – X5) affect the dependent variables (Y). The linear function was chosen on the bases of its appropriateness of the signs on the regression coefficient as specified by a priori expectation, the value of the coefficient of multiple determination R2, the number of statistically significant variables that are beta, and F-value and test.

The equation obtained from linear function regression result is as follows:

$Y= 1.934a + o.441X_1 + 0.213X_2 + 0.107X_3 – 0.216X_4 + 0.396X_5$

a = Constant
X_1 = Dread
X_2 = Controllability
X_3 =Publicity
X_4 = Choice
X_5 = Trust
Y = Demand for insurance

The coefficient of multiple determination R^2 of 0.811, which implies that 81.1% of the total variation in the demand for insurance among motorcycle riders, was explained by the independent variable. The remaining 18.9% not explained could be attributed to the stochastic variation. The Beta value of the coefficients X_1 and X_5 were statistically significant at 5% levels. This implies that dread (X_1) and trust (X_5) contributed significantly to the demand for insurance.
The positive regression coefficient of X_1, X_2, X_3 and X_5 indicate that increase in dread, controllability, publicity and trust will have an increasing effect on demand for insurance, which eventually can lead to a post-loss control measure. The negative regression of X_4 indicates that any increase in their choice for hazard perception skill (i.e., pre-loss control skills) will lead to decrease in their demand for insurance.

The dread (X_1) had a coefficient of 0.441, which implies that any one-unit increase in the dread exercised by motorcycle riders would increase their demand for protective measures by 0.441 in the level of insurance demand. This is consistent with findings in an earlier study by Slovic et al. (1982) that the higher an activity's score in the dread, the higher the people's perceived risk and the more the people seek to have their risk reduced. This shows that the high-level dread that could be expressed by motorcyclists for poor road design and loss prone activities are more likely to result in the demand for motorcycle insurance considering factors such as risk awareness and attitude, financial status, pricing, and loss frequency and severity of motorcycle riders. This corroborates the study of Torbjørn and Trond (2013), who noted the magnitude

Table 1. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.900a	.811	.809	.28117	.811	476.280	5	556	.000	.063

a. Predictors: (Constant), TRUST, DREAD, PUBLICITY, CONTROLLABILITY, CHOICE

b. Dependent Variable: DEMAND FOR INSURANCE

Table 2. ANOVA[b]

Model	Sum of Squares	df	Mean Square	F	Sig
1. Regression	188.271	5	37.654	37.654	.000a
Residual	43.957	556	.079	.079	
Total	232.228	561			

a. Predictors: (Constant), TRUST, DREAD, PUBLICITY, CONTROLLABILITY, CHOICE

a. Dependent Variable: DEMAND FOR INSURANCE

of perceived risk and risk awareness, acceptability or tolerance as being influential to decisions about health protection behaviour and demand for mitigating the risks.

Controllability (X_2) has a coefficient of 0.213, which means that the more controllable mechanism adopted by the motorcycle riders, the more their chances to have appropriate hazard perception skills. However, safe driving, being the ability to promptly detect potential hazards, can be helpful to riders in reacting swiftly and effectively to averting risk crashes (Tagliabue & Sarlo, 2015; Vidotto et al., 2011). This corroborates the study of Shahar et al. (2010), who noted that experienced motorcycle riders tend to have improved hazard perception and avoidance skills compared to inexperienced motorcycle riders. The improved hazard perception skills influenced by their controllability measures express their positive risk attitude, which reflects one of the factors influencing their demand for insurance.

Furthermore, publicity (X_3) is an important contributory factor to demand for insurance and it is expected to contribute positively to motorcycle insurance among motorcycle riders. It has a coefficient of 0.107, which implies that for every one unit measure of increase in publicity level, there is an expectation of increase of 0.107 in the level of insurance demand by motorcycle riders. According to the table below, publicity is not statistically significant but contributes positively to demand for insurance among motorcycle riders. The study of Andy and Terry (2012) noted that understanding how the public thinks about risks and causes of traffic accidents is crucial for policy makers in setting their agenda for risk-reduction actions. Then, further evidence by Aderinlewo and Ata (2014) suggested risk information as having positive contribution on motorcycle riders'

Table 3. Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.934	0.99		19.443	.000
	DREAD	.222	0.29	.441	7.731	.000
	CONTROLLABILITY	.115	0.43	.213	2.673	.008
	PUBLICITY	.077	0.51	.107	1.520	.129
	CHOICE	-.152	0.59	-.216	-2.583	.010
	TRUST	.382	0.48	.396	8.040	.000

a. Dependent Variable: DEMAND FOR INSURANCE

behaviour with respect to their activities on the road.

Choice (X_4) has a coefficient of -0.216, which implies that the more the authorities (such as Government, Road Safety Authorities and the like) leave hazard perception skills at the option or choice of the motorcycle riders, the lesser urge for demand for insurance by motorcyclists. However, consumers must often make choices in the presence of uncertainty and risk (Jakun & Shaw, 2003), but predominantly as a protective measure.

Trust (X_5) has a coefficient of 0.396, which implies that for every one unit measure of increase in trust level of motorcycle riders, there is an expectation of increase of 0.396 in the level of their insurance demand. According to Lobb (2004), a consumer's trust in the "institution" or individual they purchase from, to some extent, must be unconditional, as consumers are fully reliant on a provider's reputation and a regulator's competence. There is ample evidence in the work of Siegrist (2000), Poortinga and Pidgeon (2005), and Bronfman et al. (2008) suggesting that strong relationship between risk perception and trust in authorities have high-level acceptability of a hazard.

CONCLUSIONS

This study attempts to examine hazard perception effects on the demand for insurance among motorcycle riders in Lagos State. The study found that apart from choice that expresses an inverse relationship with the level of demand for insurance by motorcycle riders, all others showed a positive relationship. The study confirms hazard perception has been a predictor to crash risk. However, the study of Mayou and Byrant (2003) reiterates a high-risk crash-related disability among motorcyclists, as Hosking et al. (2010) noted hazard detection as a function of responding appropriately to hazard and thus, ensuring crucial driving skill as a pre-loss control measure.

On recommendation, governments should create strategic plans to ensuring that insurance education is canvassed among motorcycle riders. More so, controllable measures (such as brakes, helmet, goggle, etc.) should be reiterated among motorcycle riders to avoid or lessen crash risk. However, a consortium of motorcycle riders should come together to have pool of funds controllable by an insurance company for post-loss situations that

could befall any of their members. Frequent enlightenment programmes should be organized by stakeholders to educate the motorcycle riders of the potentially dangerous movable or stationary objects on the road. Lastly, governments should enforce compulsory motorcycle insurance policies among the motorcycle riders, primarily to serve as a protective measure for the motorcycle riders and passengers.

The study suggests that future studies should focus efforts at gathering information from the insurance companies concerning motorcycle riders' desire to buy insurance. Research efforts could be drawn at investigating the effectiveness and efficiency of demand for insurance among motorcycle riders and motorcycle insurance providers. Lastly, future research could also chart a model for hazard detecting, threat appraisal, action selection and hazard control.

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