



## A Study On Pet Health Insurance And Its Impact On Owners Spending For Veterinary Services With Reference To Mysuru City

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### Abstract

Pet health insurance business has the potential to grow in India because of the higher number of pet adoption and the trend of pet-loving lifestyle, but it is unorganised sector in India because lack of awareness. The pet population is increasing in India, but access to veterinary care continues to be a concern. Affordability to pay for veterinary services is a challenge for some pet owners. The presence of pet health insurance is one tool that can help alleviate this burden. This paper estimated awareness and willingness-to-pay for pet insurance, veterinary visit and expenditure and driving forces behind dog owner choice regarding health care for their dog. The quantitative method with online questionnaire was conducted by focusing on the dog owners and 235 responses were collected in Mysuru region. Several tests were applied such as descriptive statistics, reliability test, factor analysis, correlation and regression, it was found that veterinary visit, expenditure, pet responsibility, and prevention of financial risk from pet adoption had a significant and positive impact on purchasing of pet health insurance. The result shows that 74% of dog owners were not aware of pet insurance, 75% agrees that veterinary cares are costly and causes financial stress and 88% of dog owners are willing to pay for pet health insurance. Findings from this study can help the pet health insurance company to build an effective marketing strategy that leads to effective growth in India. Further research should explore about reason to purchase pet insurance, what are the barriers of purchasing pet insurance and how it affects the pet owner behavior.

**Keywords:** Dog owner, pet health insurance, financial risk, willingness, awareness, visit and expenditure, pet responsibility.

### 1. INTRODUCTION

Insurance is a contract that, as represented by a policy, binds an insurance company to provide financial protection or payment against losses to a person or organisation. Pet insurance is a sort of insurance coverage that allows pet owners to defray the cost of caring for their animals, such as pigs, dogs, cats, birds, fish, horses, rats, and other rodents. Similar to health insurance for people, pet insurance covers just veterinarian expenses for animals. Pet insurance is a sort of insurance that protects the general health and welfare of different types of animals. It is a policy that a pet owner buys in order to assist with and fully cover the cost of their pet's medical costs. Pet insurance is similar to health insurance for people in that it solely covers animal and veterinary cost.

Pet insurance is the most unorganised sector in India. But pet adoption is becoming highly popular in India. Numerous advantages of having a pet include their ability to be a devoted friend and a stress reliever, both of which can aid owners' physical health and well-being. The owners will suffer if their dogs die or become unwell due to an accident or disease. Therefore, caring for a pet's health by providing medical and they should receive care as needed to maintain their health so they can remain with the owner for an extended period of time of time is another responsibility of pet owners in addition to giving them food and a place to live. Pet insurance could be a helpful tool for pet owners because it can help them fulfill their responsibility as pet guardians and helping to cover unexpected medical bills or other expenses related to pet health, which can enhance their animals' quality of life and welfare of their animals. The number of pet owners in our generation who treat their animals as family members is steadily rising. These groups are willing to spend more money on their pets and will take extremely good care of them. They also worry deeply about their health. In light of the growing trend of pet adoption in India, pet insurance is one of the attractive businesses with growth potential.

Pets play an important role in modern society as a source of friendship and happiness for their owners as well as from an economic aspect due to the vast amount that pet owners spend each year on maintaining their animals. There are estimated to be 29 million households in India with at least one pet dog. Due to the increased rate of pet adoption, it is important to take care of a pet's health and wellness. The Indian healthcare system offers medical insurance to help with the cost of visits and treatments for the care of people. The pet care business is also affected, however there is currently very little regulation in India. Similar to human health insurance, pet insurance assists in defraying the expenses of

treatments that are impossible to predict in the future. Although pet health insurance has been in the United States since 1980, it has taken a while for it to catch on in India as a way to pay for veterinarian care. The main factor contributing to India's low adoption rate is the ignorance of pet owners regarding pet health insurance. As more people learn about it, the adoption rate of pet health insurance will increase. Both dog owners and veterinarians have significant challenges when it comes to the cost of veterinary care. One of the best tools for easing this burden is the availability of pet health insurance. The pets experience an unforeseen accident. Pets may go missing, be stolen, or pass away before they should. As more people choose to have pets and wish to keep them in good physical and mental health, high-quality medical treatment should be given to the animal. The expense of veterinary treatment has increased in recent years, just like it has for humans. Insurance is available when receiving medical care seems to be too expensive. Unlike human health insurance, the pet insurance assists in defraying expense of the treatments that are impossible to predict in the future. In order to avoid large financial difficulties in the future, policyholders pay a small, standardised payment each month. However, having an insurance product can occasionally alter a pet owner's behaviour, such as increasing the frequency of doctor's visits or checking oneself into a hospital. Additionally, it has been observed that the pet owner who have pet insurance tend to pay more as a pet similar to how humans age health protection Veterinarians and the veterinary care team may play a vital role in highlighting the benefits of pet health insurance as a form of payment for the owner as well as benefiting the doctor and practice.

In this article, we explore a variety of pet dog and pet owner attributes using a variety of models to assess the impact that these traits have on a decision of dog owner to take their dog to the veterinarian, spend more money there, and whether or not they are able to afford insurance. The fact that there is pet health insurance is notable in particular because it enables pet owners to pay veterinary expenses that they otherwise might not be able to do at the outset of a pet crisis, and the veterinarian can provide the best care the pet needs without being constrained by the owner's financial situation. Costs of medical care are a common issue for pet owners. If they were unable to afford their pets' pricey but required care, some pet owners could feel guilty. Veterinarians' ability to give pets the best treatment is frequently hampered by the financial constraints of pet owners. Veterinarians don't often talk about fees with pet owners, and they might not explain expenses in a way that's helpful to pet owners. By removing negative feelings and impressions linked to the inability to pay for veterinary care, pet insurance may be a way to improve the doctor-patient connection and deepen the bond between humans and animals.

### **1.1 HISTORY OF PET INSURANCE**

Around Sweden in 1890, the idea of pet insurance policies first emerged. In Sweden in 1924, half the dogs had insurance. In 1947, popularity in Britain increased. The first Veterinary Pet Insurance firm, which provides pet insurances, was founded in North America in 1980. More than 5 lakh pets were due to the entry of well-known organisations onto the market in 2005, insured in the United States. India's economy is still mostly unorganised. The first pet insurance plan was offered for sale in Britain in 1947. Britain had the second-highest percentage of pet insurance in the world as of 2009 (23%) after only Sweden. 2.81 million pets in North America have insurance in 2019 according to the most recent information available from the Pet Food Institute and the U.S. Department of Clinical Veterinary Science.

### **1.2 PET INSURANCE INCLUSION**

- Accidental death
- Illness acquired while the coverage is in effect
- Costs associated with treatment
- Third Party Liability
- Loss/theft of the pet
- Incapacitation
- Accidental Poisoning
- Accident while in transit (by train, air, or road)

### **1.3 EXCLUSION OF PET INSURANCE**

- Loss or harm resulting from war, foreign enmity, revolution, insurrection, military upheaval, etc.
- Malicious injury to the pet
- Injury or disease resulting from negligence or careless handling of the pet
- Death from diseases including leptospirosis, rabies, distemper, viral hepatitis, viral enteritis, etc.
- Illness acquired prior to purchasing the policy.

### **1.4 LIST OF PET INSURANCE COMPANY IN INDIA**

**1. New India Assurance Company Limited:** This insurer allows pet insurance for dogs which is under 8 weeks to 8 year old dogs can be insured by paying about 5% of SI as premium. The pets will have coverage against illnesses happens during the policy period. Other pet policies available with this insurer are: Insurance of sheep, goat, cattle, Pig, camel, poultry, duck, rabbit, elephant insurance, inland fish etc.

**2. Oriental Insurance Company Limited:** This insurer provides insurance for horse, dogs and elephants etc. It can be availed by paying a premium of rupees 200 to rupees 10,000.

**3. Future Generali India Insurance Company Limited:** It provides facility of emergency pet minding, surgery and hospitalization, doctors on call facility. The insurer allows pet insurance for dogs which is from 6 month to 10 years.

**4. United India Insurance Company:** It provides insurance for exotic and native animal breeds which have disability and death due to accident.

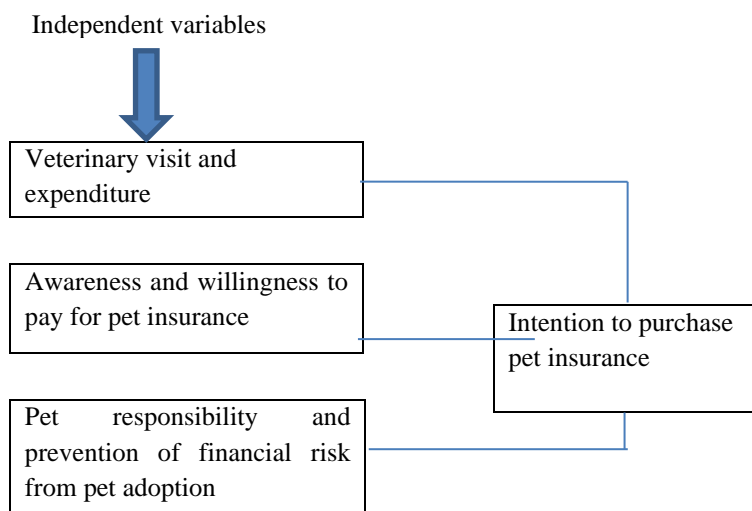
**5. Bajaj Allianz General Insurance**

**6. Company Go Digit General Insurance**

**1.5 THEORETICAL BACKGROUND AND HYPOTHESIS**

Insuring against unforeseen negative events is a must. A simple financial instrument for managing risks is insurance. Millions of people now cannot afford the soaring costs of medical care. With insurance coverage, it is now simpler for individuals to get high-quality medical care when they need it. Many animal lovers, including dog owners, place a high value on their dogs. Some people consider their dogs or cats to be family members and love them as much as their children. Some people cuddle and play with their pets all day while they sleep on the bed. Some people allow their pets to travel with them on vacations and even accompany them to works. These folks generally wouldn't mind spending money on their pet's food and medical care as long as it keeps them healthy because pets are so essential to these categories of people. Pet health care can still be expensive, and the cost is rising, while being less expensive than human health care. There are more veterinary clinics and hospitals opening in Mysore. Pet medical care is just as difficult as human medical care. Regular vaccinations are given to avoid all infections. Unexpected accidents do occasionally happen to pets.

Pets may go missing, be stolen, or pass way before they should. As more people choose to have pets and wish to keep them in good physical and emotional health, the animal needs receive top-notch medical treatment. The expense of veterinary treatment has increased in recent years, just like it has for humans. Insurance is available when receiving medical care seems to be too expensive. A pet owner can get pet insurance to help pay for the overall cost of their animal's medical expenses, including those for their dog, cat, bird, horse, pig, rat, rabbit, fish, etc. Similar to health insurance for people, pet insurance covers only animals and veterinarian expenses. Animals are incredibly important to humans since they make wonderful companions and reliable revenue. However, emotional anguish can result from losing a pet or witnessing one suffers. While it can be challenging to locate and replace our beloved pets. India lags considerably behind western nations in the number of pet owners who adopt pet insurance policies. While the idea of pet insurance policies has a very long history in other nations, India currently has very little regulations. Despite the fact that pet health insurance has been available in the US since 1980, it has taken a very long time for it to be accepted in India as a way to pay for veterinarian care. As an unregulated industry in India, pet insurance is growing slowly but steadily as the country's population of animal lovers rises. The primary cause of India's poor adoption rate is pet owners' ignorance of and disregard for pet health insurance. As more people learn about it, the adoption rate of pet health insurance will swiftly increase. The dog owners and veterinarians have significant challenges when it comes to the cost of veterinary care.



**Graph 1.5:** Conceptual model

The factor of Intention to Purchase Pet Insurance will be fixed as a dependent variable because this study examines the influences on pet owners' decision to buy pet insurance. The three independent variables will be investigated on its effect toward purchase intention which is veterinary visit and expenditure, awareness and willingness to pay for pet insurance, Pet responsibility and prevention of financial risk from pet adoption.

**HYPOTHESIS**

- H<sub>01</sub>:** Dog owner characteristic is not significant in impacting expenditures and visits at the veterinarian.
- H<sub>1</sub>:** Dog owner characteristic is significant in impacting expenditures and visits at the veterinarian.
- H<sub>02</sub>:** Lack of awareness has no significant impact on purchase of pet insurance.
- H<sub>2</sub>:** Lack of awareness has significant impact on purchase of pet insurance.
- H<sub>03</sub>:** Pet responsibility and prevention of financial risk from pet adoption no significant effect on the intention to purchase pet insurance.
- H<sub>3</sub>:** Pet responsibility and prevention of financial risk from pet adoption has significant effect on the intention to purchase pet insurance.

**2. MATERIALS AND METHODS**

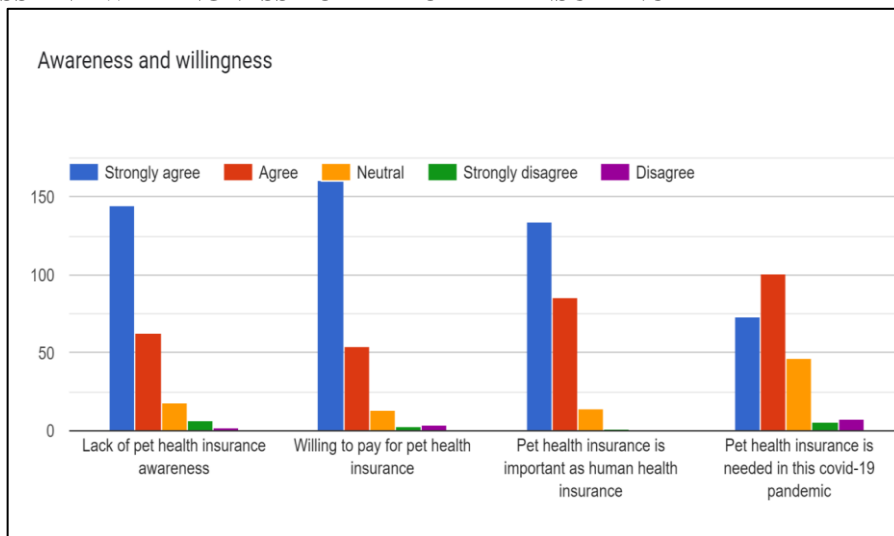
**Survey**

This study employs a quantitative approach to answer its research questions by gathering information online through a Google form. Responses to the multiple-choice questions and a 5-Point Likert scale, from strongly disagree (1) to strongly agree (5), are expected from the responders (5).

In the study 235 online survey responses of pet dog owners across Mysore region was collected. Survey participants were pet dog owners aged from 18 years and older. The survey includes questions on owner’s age, gender, educational qualification, occupation, annual income, number of pet dog owned, pet’s age, type of breed, size of breed, how long you owned pet, hours spent on your pet, type of food given to your pet, dog sleeping place, monthly expense on pet care, amount spent on pet for veterinary expense last year, number of time visited to veterinarian last year, major illness of pet in the past, aware of pet insurance, is your pet insured, main reason for not having pet insurance, willingness to pay for pet insurance, How much money would you be willing to spend each month for pet insurance, etc. After tabulating the survey responses, descriptive statistics, reliability test, factor analysis, regression, and correlation were produced.

**3. RESULT**

**3.1: AWARENESS AND WILLINGNESS TO PAY FOR PET INSURANCE**

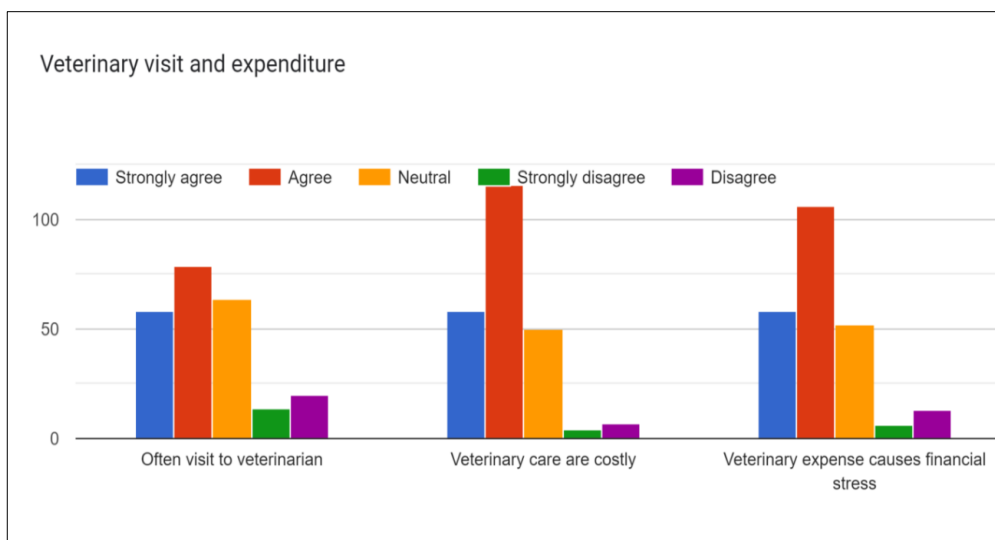


**Graph 3.1:** Awareness and willingness to pay for pet insurance

Since determining awareness of and readiness to pay for pet insurance is the study's primary goal. As pet insurance is unorganised sector in India but the adoption of pets is slowly increasing now a days. A sample of 235 pet owners in Mysore was surveyed. 42% of the respondents were male and 58% were female. 73% of pet dog owners in Mysore are not aware of pet insurance. 26% of respondent were aware of pet insurance as they heard from family, friends, veterinarian etc. 90% of the respondent has not insured their pet because they were not aware of pet insurance. And few respondents have purchased pet insurance because of veterinarian recommendation. Very few respondent were aware of pet insurance but not purchased because financial condition. However, as more people learn about it, the adoption rate of pet health insurance will rise. In addition, 88% of dog owners said they would be willing to pay for pet insurance.

**3.2: VETERINARY VISIT AND EXPENDITURE**

While there are now over 29 million households in India with dogs, dog ownership has grown in popularity. Number of visited to veterinary and expenses on pets care will come into picture. As 235 pet dog owners in Mysore region have given response. 83% of respondent owns one dog, 12% of respondent owns two dogs, and 7% of respondent owns above three dogs. On an average the dog age ranges from 4 to 6 years. 50% of pet owners have small dog size, 22% have medium size dog and 27% have large dog size.



**Graph 3.2:** Veterinary visit and expenditure of pet owners

When the respondent was asked about how long you owned pet then, 47% of dog owners said 1 to 3 years, 15% said less than one year, 26% said 4 to 6 years, and 10% said 7 to 9 years. When the respondent was asked about number of time visited to veterinarian last year, 23% of dog owner has not visited to veterinarian, 24% visited once, 25% visited twice, and 18% visited more than 4 times. When the respondent was asked about monthly expense on pet care, then 60% of dog owners will spend Rs.1000 to 2000 per month, 30% said less than Rs.1000 and 8% said 3000 to 5000 per month. When the respondent was asked amount spent on pet for veterinary expense last year then 21% of respondent said zero because the dog was purchased recently, 52% said Rs.1000 to 3000, 17% said 4000 to 6000 and 5% said above 7000. The major illness of the dog was diarrhoea, Cancer, Ear infection, Obesity, Skin infection, Running eye, Fractures due to accident, Bone issue, Fever, Fractures, Vaccination, Vomiting and Diarrhoea, Bladder infection, Kidney disease, Eye injury, Bacterial infection, Distemper, Viral infection, Dental disease, Oral infection, Stiffness and Pain, Skin allergy, Kidney stone, Hip Dysplasia, Bone injury, Upper respiratory disease, Hearing problem, Vocal infection and vomiting, Urinary infection, Leg fracture, Running eyes and nose, Respiratory infection, Asthma, Canine distemper virus, Elbow Dysplasia. On an average the 48% of dog owners often visit to veterinarian as they strongly agreed. On an average 80% of dog owners agree that veterinary care is costly hence it causes financial stress.

### 3.3: PET RESPONSIBILITY, RISK PERCEPTION AND PREVENTION OF FINANCIAL RISK PET RESPONSIBILITY

Pet owners have a responsibility to take care of their animals' physical needs in order to maintain their dogs' health and quality of life. Human-pet relationships are related to pet responsibility. Different pet responsibilities correspond to different types of human-animal connections. According to attachment theory, which was used in the research of human-pet relationships, there are variable levels of attachment among pet owners, and this variation affects pet-related cognitions, emotions, and behaviour. Pet owners have a duty to provide sterilisation, vaccination, microchipping, pet insurance, and other medical care in addition to meeting the five criteria for animal welfare, which include a suitable environment, a suitable diet, the ability to exhibit normal behaviour patterns, whether the pet is housed with other animals or not, and the need to be protected from pain, suffering, injury, and disease. One aspect that might encourage pet owners to buy pet insurance in order to fulfill their responsibility assignment is pet responsibility.

From the data collected via survey, 83% of respondent owns one dog, 12% of respondent owns two dogs, and 7% of respondent owns above three dogs. The dog age is considered and 11% respondents were having a dog which is less than 1 year, 24% of respondent dog age was between 1 to 3 years, 38% respondent dog age was between 4 to 6 years, and 24% respondent dog age was between 7 to 9 respectively. 50% of pet owners have small dog size, 22% have medium size dog and 27% have large dog size. When the respondent was asked about how long you owned pet then, 47% of dog owners said 1 to 3 years, 15% said less than one year, 26% said 4 to 6 years, and 10% said 7 to 9 years. Most of the dog owners are having dog breed such as Pug, Golden Retrievers, Labrador Retriever, Pomeranian, Indian Spitz, German shepherd, Rottweiler, Shitzu etc. On an average the dog owners spend 2 hour time with their pets. 51% of respondent will give home cooked food to their pets and 41% will give pedigree food. On an average of 46% of pet owner will allow their pets to sleep outdoor and 16% in the bed rooms, and 17% out of room.

#### RISK PERCEPTION

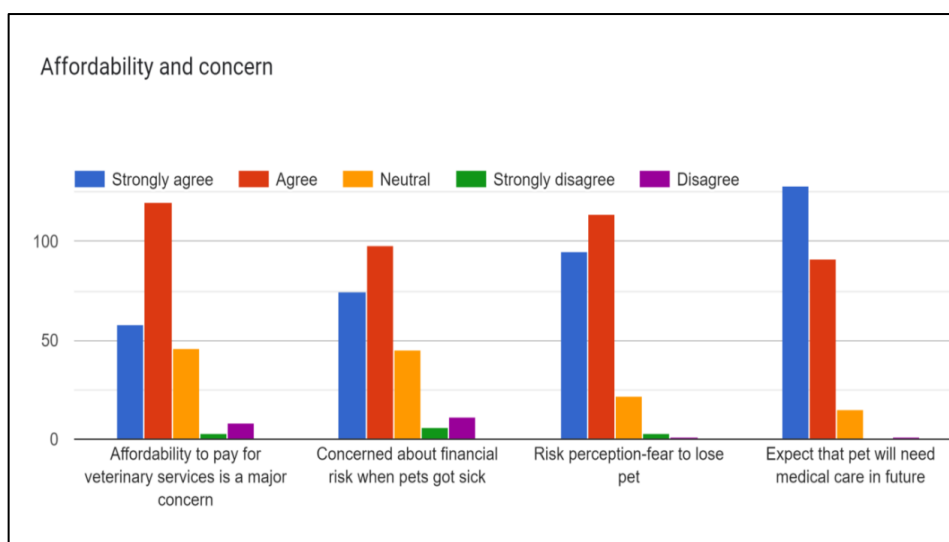
Adopting a pet can provide its owners with a number of benefits, including companionship, a positive response to care and attention, the fact that pets are tolerant of all people and offer unconditional love, as well as psychological and social support. However, there are a number of disadvantages to having pets, including financial difficulties caused by financial worries about their pet being sick or dying. Four factors such as fear of pets getting sick or dying in the future,

expecting pets to need medical attention in the future, and dread of losing pets—will be used to define the risk perception term. Impact of pet adoption related risk perception on desire to get pet insurance.

### FINANCIAL RISK

Getting health insurance is frequently done to reduce financial risk. Pet owners like to foresee the cost in order to manage their finances effectively. Therefore, they insist on knowing the upfront price of the procedures or services before the veterinarians carry them out. According to studies on pet insurance, preventing financial risk is the primary motivation behind buying the policy since pet insurance can assist pet owners in accurately anticipating costs, reducing unforeseen costs, and preventing financial dangers.

When the dog owners were asked that a big worry is the cost of veterinary care, then on an average 90% of pet owners agreed. 74% of dog owners agreed that veterinary expense causes financial stress. 70% of dog owners concerned about financial risk when pets got sick. 92% of dog owners have risk perception-fear to lose pet. 94% dog owners anticipate their pets' future medical needs. 95% of the importance of pet health insurance is something that dog owners strongly believe in. In light of the COVID-19 outbreak, 70% of pet owners agree that pet health insurance is necessary. As a result, choosing to purchase pet insurance is influenced favourably by reducing the financial risk connected with pet adoption.



Graph 3.3: Affordability and concern of pet owner

### 3.4: DESCRIPTIVE STATISTICS

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	235	1	2	1.58	.494	-.339	.159	-1.902	.316
Age (in years)	235	1	6	2.05	1.081	1.004	.159	.718	.316
Education Qualification	235	1	4	2.69	.693	.191	.159	-.488	.316
Occupation	235	1	7	3.67	2.413	.181	.159	-1.598	.316
Annual Income (In Lakh)	235	1	5	1.87	.906	1.159	.159	1.429	.316
Number of pet dog owned	235	1	4	1.24	.624	3.071	.159	9.780	.316
Type of breed	235	1	14	5.53	4.012	.823	.159	-.561	.316
Size of breed	235	1	3	1.78	.854	.442	.159	-1.488	.316
How long you owned pet	235	1	5	2.34	.913	.553	.159	.103	.316
Hours spent on your pet	235	1	4	1.88	.869	.904	.159	.303	.316
Type of food given to your pet	235	1	5	1.74	.789	1.612	.159	4.225	.316
Dog sleeping place	235	1	5	2.77	1.058	-.152	.159	-.464	.316
Monthly expense on pet care	235	1	4	1.83	.647	.565	.159	.965	.316
Aware of pet insurance	235	0	1	.27	.444	1.054	.159	-.897	.316
Amount spent on pet for veterinary expense last year	235	0	4	1.16	.938	1.051	.159	1.320	.316
How did you hear about pet insurance	235	1	6	4.87	1.793	-1.099	.159	-.542	.316
Is your pet insured	235	0	1	.11	.314	2.498	.159	4.279	.316
Main reason for not having pet insurance	235	1	4	1.66	1.189	1.362	.159	-.019	.316
Willing to pay for pet insurance	235	0	1	.89	.320	-2.431	.159	3.942	.316



What is the most per month you would be willing to pay for pet insurance	235	0	7	2.11	1.186	1.179	.159	3.845	.316
Veterinary visit and expenditure [Often visit to veterinarian]	235	1	5	3.63	1.123	-.609	.159	-.217	.316
Veterinary visit and expenditure [Veterinary care are costly]	235	1	5	3.92	.854	-.808	.159	1.103	.316
Veterinary visit and expenditure [Veterinary expense causes financial stress]	235	1	5	3.84	.947	-.798	.159	.609	.316
Affordability and concern [Affordability to pay for veterinary services is a major concern]	235	1	5	3.94	.833	-.791	.159	1.050	.316
Affordability and concern [Concerned about financial risk when pets got sick]	235	1	5	3.96	.964	-.924	.159	.749	.316
Affordability and concern [Risk perception-fear to lose pet]	235	1	5	4.26	.750	-1.272	.159	3.213	.316
Affordability and concern [Expect that pet will need medical care in future]	235	2	5	4.47	.636	-.902	.159	.244	.316
Awareness and willingness [Lack of pet health insurance awareness]	235	1	5	4.43	.900	-2.032	.159	4.544	.316
Awareness and willingness [Willing to pay for pet health insurance]	235	1	5	4.56	.784	-2.201	.159	5.526	.316
Awareness and willingness [Pet health insurance is important as human health insurance]	235	1	5	4.50	.650	-1.313	.159	2.722	.316
Awareness and willingness [Pet health insurance is needed in this covid-19 pandemic]	235	1	5	3.97	.938	-.936	.159	.978	.316

**Table 3.4:** Descriptive Statistics

Descriptive statistics are used to summarise a particular data collection, which may be a sample of a population or a representation of the full population. Measures of central tendency and measures of variability are included in descriptive statistics (spread). The mean, median, and mode are measurements of central tendency, whereas the standard deviation, variance, minimum and maximum variables, kurtosis, and skew ness are measures of variability.

Descriptive statistics provide concise summaries of the sample and data measures in order to aid in describing and understanding the characteristics of a certain data collection. The mean, median, and mode are the most popular descriptive statistics and are employed at practically all math and statistics levels. By adding up each figure in the data set, then dividing by the total number of figures, one can find the mean or average.

The descriptive analysis consists of number of sample, mean, minimum, maximum, standard deviation, skew ness considered for the analysis. The minimum statistics values of all the variables are 0, 1, and 2. The maximum statistic values of all variables ranges from 2 to 7, 14 where 5 is most common. The statistic mean is ranges from 1 to 4.87. The mean statistics range between 1 to 4.50. The standard and kurtosis. The descriptive analysis reveals that there are 235 responses from pet owners. There are 32 variable deviation of each variable is different and it starts from 0.4 to 1.8. The standard error of skew ness is 0.159 and kurtosis is 0.316 respectively.

The descriptive analysis has two major parts one is skew ness and other is kurtosis. According to the thumb rule for skew ness, data that has a skew ness between -0.5 and 0.5 is fairly symmetrical. The skew ness of the data is considered significantly skewed if it is between -1 and -0.5 or 0.5 and 1. It is severely skewed if the skew ness is larger than 1 or less than -1. The best kurtosis range is greater than 3 or less than 3. From the table 3.4, it is seen that the skew ness value is .159 which means it is highly skewed. The kurtosis value is .316 which represents the true value for the skew ness and kurtosis.

**3.5: RELIABILITY TEST**

Reliability Statistics	
Cronbach's Alpha	N of Items
.808	19

**Table 3.5.1:** Reliability Statistics

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
57.45	54.864	7.407	19

**Table 3.5.2:** Scale Statistics

The level of accuracy that a test measures without error is referred to as reliability. It is intimately related to test validity. Precision, or the degree to which measurements are error-free, can be thought of as a measure of test dependability.

Reliability testing is done to make sure the programme is trustworthy, fulfills the goal for which it was created, does so for a predetermined amount of time in a predetermined environment, and is capable of performing faultlessly.

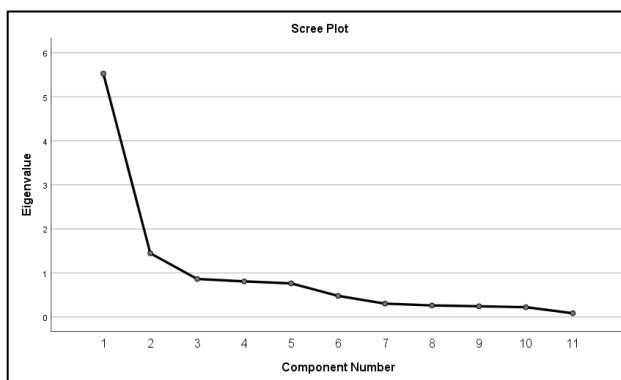
The reliability test is performed by selecting 19 variables. There are 235 responses. The result from reliability statistics shows that the value of Cronbach's Alpha is 0.808 which indicates very good level of reliability. From the scale statistics, the mean is 57.45, variance is 54.864 and standard deviation is 7.407.

If the alpha value is less than 0.5 it shows unacceptable reliability. Alpha value between 0.6 to 0.5 is poor reliability, between 0.7 to 0.6 is questionable reliability, between 0.8 to 0.7 acceptable reliability, between 0.8 to 0.9 good reliability and greater than 0.9 it is excellent reliability. Hence from the table 3.5.1, the reliability is greater than 0.8 it indicates that there is good reliability. It tells that 80% of the factors are reliable and 20% of factor does not relate to the content.

### 3.6: FACTOR ANALYSIS

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	of	.847
Bartlett's Test of Sphericity	Approx. Chi-Square	1654.276
	Df	55
	Sig.	.000

**Table 3.6.1:** KMO and Bartlett's Test



**Graph 3.6:** Scree plot of factor analysis

A statistical technique known as factor analysis is used to express variation among connected, observable variables in terms of a possibly smaller set of unobserved variables known as factors. Factor analysis, commonly referred to as dimension reductions, is a statistical technique for condensing vast amounts of data into a manageable amount of information. In essence, factor analysis minimise the dimensions of the data and divides it up into fewer variables. This modest amount of info is now easier to handle and comprehend.

The Kaiser-Meyer-Olkin Measure (KMO) value is 0.847, the chi-square value is 1654.276 with 0.000 significant value of Bartlett's test. Hence the KMO value is greater than 0.5 that is 0.847 which is less than Bartlett' test value which indicates that there is substantial correlation in the data. The total component used is 11 and cumulative percentage is 63.38% with the variance of 29.80%.The cumulative percentage of all variable is greater than 50% which suggest that the sample is adequate. The value of KMO closer to 1.0 indicates ideal, less than 0.5 indicates unacceptable and KMO values between 0.8 to 1 indicates the sampling is adequate. KMO with 0.80 is very good for factor analysis to commence.

From the table-3.6.1, KMO value is 0.847 which indicates the adequate sampling. The significance level of Bartlett's test is 0.000 which is less than 0.05 indicates that there is a substantial correlation in the data. The cumulative variance percentage should not be less than 60%. From the table-4.6.2 the cumulative is 68.38%. Total 2 times of rotation sums of squared loadings is done to bring the variance in best percent.

Total Variance Explained						
Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.526	50.234	50.234	3.695	33.588	33.588
2	1.447	13.155	68.389	3.278	29.801	68.389
3	.862	7.840	71.229			
4	.808	7.346	78.574			
5	.763	6.932	85.506			
6	.479	4.356	89.863			



7	.303	2.753	92.616		
8	.262	2.382	94.999		
9	.243	2.211	97.210		
10	.222	2.019	99.229		
11	.085	.771	100.000		

**Table 3.6.2:** Total Variance Explained

**3.7: CORRELATION**

Correlations		1	2	3	4	5	6	7	8	9	10	11
1	Pearson Correlation	1	.109	.201**	.042	.043	-.117	.252**	.083	.067	-.033	.091
	Sig. (2-tailed)		.095	.002	.522	.515	.074	.000	.204	.307	.615	.165
	N	235	235	235	235	235	235	235	235	235	235	235
2	Pearson Correlation	.109	1	.187**	.038	.062	-.069	-.115	-.022	-.111	-.021	-.037
	Sig. (2-tailed)	.095		.004	.564	.344	.291	.079	.739	.089	.754	.570
	N	235	235	235	235	235	235	235	235	235	235	235
3	Pearson Correlation	.201**	.187**	1	.000	.028	.192**	.683**	.115	.091	.226**	.177**
	Sig. (2-tailed)	.002	.004		.998	.669	.003	.000	.079	.165	.000	.006
	N	235	235	235	235	235	235	235	235	235	235	235
4	Pearson Correlation	.042	.038	.000	1	.749**	-.083	-.162*	-.171**	-.193**	-.222**	-.213**
	Sig. (2-tailed)	.522	.564	.998		.000	.204	.013	.009	.003	.001	.001
	N	235	235	235	235	235	235	235	235	235	235	235
5	Pearson Correlation	.043	.062	.028	.749**	1	-.148*	-.037	-.211**	-.259**	-.272**	-.195**
	Sig. (2-tailed)	.515	.344	.669	.000		.023	.574	.001	.000	.000	.003
	N	235	235	235	235	235	235	235	235	235	235	235
6	Pearson Correlation	-.117	-.069	.192**	-.083	-.148*	1	.417**	.296**	.206**	.632**	.380**
	Sig. (2-tailed)	.074	.291	.003	.204	.023		.000	.000	.002	.000	.000
	N	235	235	235	235	235	235	235	235	235	235	235
7	Pearson Correlation	.252**	-.115	.683**	-.162*	-.037	.417**	1	.240**	.221**	.462**	.355**
	Sig. (2-tailed)	.000	.079	.000	.013	.574	.000		.000	.001	.000	.000
	N	235	235	235	235	235	235	235	235	235	235	235
8	Pearson Correlation	.083	-.022	.115	-.171**	-.211**	.296**	.240**	1	.697**	.402**	.369**
	Sig. (2-tailed)	.204	.739	.079	.009	.001	.000	.000		.000	.000	.000
	N	235	235	235	235	235	235	235	235	235	235	235
9	Pearson Correlation	.067	-.111	.091	-.193**	-.259**	.206**	.221**	.697**	1	.342**	.396**
	Sig. (2-tailed)	.307	.089	.165	.003	.000	.002	.001	.000		.000	.000
	N	235	235	235	235	235	235	235	235	235	235	235
10	Pearson Correlation	-.033	-.021	.226**	-.222**	-.272**	.632**	.462**	.402**	.342**	1	.694**
	Sig. (2-tailed)	.615	.754	.000	.001	.000	.000	.000	.000	.000		.000
	N	235	235	235	235	235	235	235	235	235	235	235
11	Pearson Correlation	.091	-.037	.177**	-.213**	-.195**	.380**	.355**	.369**	.396**	.694**	1
	Sig. (2-tailed)	.165	.570	.006	.001	.003	.000	.000	.000	.000	.000	
	N	235	235	235	235	235	235	235	235	235	235	235

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

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 3.7:** Correlation

A statistical measure called correlation shows how much two or more variables fluctuate in connection to one another. When two variables rise or decrease simultaneously, there is a positive correlation; a negative correlation occurs when one variable rises as the other lowers. The degree of a relationship between two variables is shown by the correlation coefficient, which is a numerical statement of correlation. The correlation coefficient ranges in value from -1.0 to 1.0. The correlation coefficient is 1 if a correlation is entirely positive. There is one dependent variable that is “intention to purchase pet insurance” and three independent variables such as “veterinary visit and expenditure”, “awareness and willingness to pay for pet insurance”, and “pet responsibility and prevention of financial risk from pet adoption”. The following number represents the variables with reference to table-3.7.

1. Number of pet dog owned
2. Type of breed
3. Monthly expense on pet care
4. Aware of pet insurance
5. Main reason for not having pet insurance
6. Willing to pay for pet insurance
7. How much would you be willing to spend each month for pet insurance?
8. Veterinary care are costly
9. Concerned about financial risk when pets got sick
10. Willing to pay for pet health insurance
11. Pet health insurance is important as human health insurance.

The number of response is 235. From the table-3.7, the Pearson Correlation of each variable is “1” which indicates that there is a perfect positive correlation. Correlation is significant at 0.05 level hence there is a perfect correlation between each variables.

The value of coefficient lies between -1 to +1 is considered as strong correlation. Low correlation is described as being below 0.3 and moderate correlation is described as being between 0.3 to 0.5. The Pearson Correlation of each variable is “1” which indicates that there is perfect positive correlation between each variable. The variable such as aware of pet insurance, main reason for not having pet insurance, veterinary care are costly pet owners are eager to pay for pet health insurance, which is just as crucial as human health insurance. Significance value is greater than 0.05 which indicates that all these variables has no significant impact. Other than the factors listed above, the significance value is less than 0.05, indicating that the variables are significantly impacted.

### 3.8: REGRESSION ANALYSIS

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.887	.827	.774	.451

**Table 3.8.1:** Model Summary

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102.852	24	4.285	21.885	.000
	Residual	41.123	210	.196		
	Total	143.974	234			

**Table 3.8.2:** ANOVA

Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
1	(Constant)		.411	.383		1.073	.285
	Gender		.011	.068	.057	.157	.875
	Age (in years)		.028	.039	.039	.727	.468
	Education Qualification		.027	.053	.024	.502	.616
	Occupation		-.017	.014	-.051	-1.200	.231
	Annual Income (In Lakh)		.108	.046	.125	2.336	.002
	Number of pet dog owned		-.103	.057	-.082	1.804	.073
	Type of breed		.012	.008	.060	1.459	.146
	Size of breed		-.028	.041	-.030	-.675	.010
	How long you owned pet		.044	.048	.151	.903	.367
	Type of food given to your pet		.045	.041	.045	1.081	.281
	Dog sleeping place		.053	.031	.071	1.685	.093
	Monthly expense on pet care		.119	.077	.015	.242	.001
	Amount spent on pet for veterinary expense last year		.275	.047	.291	.009	.003
	Aware of pet insurance		.258	.085	.133	-.678	.149
	Willing to pay for pet insurance		.790	.123	.322	6.416	.000
	What is the most per month you would be willing to pay for pet insurance		.113	.046	.171	2.464	.005
	Often visit to veterinarian		.133	.035	.147	.943	.001

Veterinary care are costly	.085	.068	.093	1.259	.009
Veterinary expense causes financial stress	.015	.082	.018	.177	.006
Affordability to pay for veterinary services is a major concern	-.047	.071	-.150	.663	.008
Concerned about financial risk when pets got sick	.221	.081	.225	-.254	.004
Risk perception-fear to lose pet	.032	.062	.129	.512	.005
Expect that pet will need medical care in future	.217	.071	.176	3.044	.021
Lack of pet health insurance awareness	-.004	.049	-.005	-.091	.004
Pet health insurance is important as human health insurance	.505	.070	.418	7.269	.000
a. Dependent Variable: Intention to purchase pet insurance.					

**Table 3.8.3:** Coefficients

Regression is a statistical method used to determine the kind and strength of the relationship between a single dependent variable and a number of independent variables. It is used in the domains of finance, investment, and other professions. In this study, there is one dependent variable as “intention to purchase pet insurance”, and three independent variables such as “veterinary visit and expenditure”, “awareness and willingness to pay for pet insurance”, and “pet responsibility and prevention of financial risk from pet adoption”.

The dependent variable is defined as:

IP [Intention to purchase pet insurance] = f [veterinary visit and expenditure, awareness and willingness to pay for pet insurance, pet responsibility and prevention of financial risk from pet adoption].

The model is expressed as:

IP [Intention to purchase pet insurance] = f (Gender, Age, Education Qualification, Annual Income, Number of pet dog owned, Type of breed, Type of food given to your pet, Dog sleeping place, Monthly expense on pet care, Amount spent on pet for veterinary expense last year, Often visit to veterinarian, Aware of pet insurance, Is your pet insured, Main reason for not having pet insurance, being prepared to pay for pet insurance, What amount would you be willing to spend each month for pet insurance, Veterinary expense causes financial stress, Concerned about financial risk when pets got sick, Expect your pet to require medical attention in the future. Fear of losing a pet is a risk perception; pet health insurance is crucial, much like human health insurance).

There are three independent variables. The first variable is “veterinary visit and expenditure” and has the following factors: Gender, Age, Education Qualification, Annual Income, Number of pet dog owned, Type of breed, Monthly expense on pet care, Amount spent on pet for veterinary expense last year, number of time visited to veterinarian last year. The following elements are included in the second independent variable, "awareness and willingness" to pay for pet insurance: knowing about pet insurance do you insure your pet? primary justification for without pet insurance being prepared to pay for pet insurance, How much would you be willing to spend each month for pet insurance.

The third independent variable is “pet responsibility and prevention of financial risk from pet adoption” and has the following factors: Type of food given to your pet, Dog sleeping place, hours spent on pet, Veterinary expense causes financial stress, Concerned about financial risk when pets got sick, Expect your pet to require medical attention in the future, Risk perception: anxiety over pet loss, Pet health insurance is important as human health insurance).

In order to determine the dog owner characteristics that have an impact on the costs and trips to the veterinarian, pet insurance awareness and understanding among pet owners, and willingness to pay for pet insurance, a linear regression model is utilised. The dependent variable is intention to purchase pet insurance. The value of R square 0.90 and above is considered to be highly correlation. From the table-4.8.1, the value of R square is 0.827 which means the input variables account for 82% of the variation in the output variable. The R value is 0.887, the adjusted R square value is 0.774 and estimated standard error is 0.451 respectively. The beta coefficient is less than 1 which indicates that it is standardized against one another which mean each variable is on same scale. From ANOVA table-3.8.2 the level of significance is 0.000 which is less than 0.05 which indicates there is a significant impact on dog owners.

The result is explained by the following regression equation:

$$\text{Intention to purchase pet insurance} = 0.411 + (0.133 * \text{veterinary visit and expenditure}) + (0.790 * \text{awareness and willingness}) + (0.221 * \text{risk responsibility and prevention of financial risk from pet adoption})$$

The regression equation shows how independent variables relate to one another (veterinary visit and expenditure, understanding of and desire to purchase pet insurance, pet responsibility and prevention of financial risk from pet adoption) and dependent variable (intention to purchase pet insurance). Intention to purchase will increase by 0.133 units for every unit increase in veterinary visit and expense. Then, after increasing awareness and willingness by 1 unit each, 0.258 unit of Purchase intent will be included. Next, the intention to acquire will increase by 0.221 while risk responsibility will increase by 1 unit and financial risk will be prevented.

The first influential factor, veterinary visit and expenditure has dramatically impact consumer intent to purchase (sig = .001 and beta= 0.147) which mean that the pet owners who often visit to the veterinarian has lots of expense which causes financial stress and have higher intention to purchase. As the value is less than 0.05 it indicates that has significant difference between the selected variables. Hence alternative hypothesis is accepted (H<sub>1</sub>) and the null hypothesis is rejected (H<sub>01</sub>). Hence dog owner characteristic is significant in impacting expenditures and visits at the veterinarian. This result also confirms the hypothesis 1.

The second influential factor, awareness and willingness has significantly affect purchase intention to purchase pet insurance (sig. = .000 and beta = 0.322) which means the pet owners are not aware of pet insurance and now willing to pay for pet insurance and agrees that pet health insurance is important as human health insurance. As the value is less than 0.05 it indicates that has significant difference between the selected variables. Hence alternative hypothesis is accepted ( $H_2$ ) and the null hypothesis is rejected ( $H_{02}$ ). Hence lack of awareness and willingness to pay has significant impact on purchase of pet insurance. This result confirms the hypothesis 2.

The third influential factor, risk responsibility and prevention of financial risk from pet adoption also has a favourable effect on the intention to get pet insurance (sig. =.004 and beta =.225), indicating that pet owners who are worried about the financial risk their animals pose are more likely to want to buy pet insurance. As the value is less than 0.05 it indicates that has significant difference between the selected variables.

Hence alternative hypothesis is accepted ( $H_3$ ) and the null hypothesis is rejected ( $H_{03}$ ). Hence there is significant impact on dog owners for purchase of pet insurance. This result confirms the hypothesis 3.

#### 4. DISCUSSION

Data on stated preferences from a questionnaire survey carried out in the Mysore region were used in this study. The data was collected and estimated to find the objectives. Descriptive statistics, a reliability test, a factor analysis, a correlation analysis, and a regression test were used. There is one dependent variable and multiple independent variables. Numerous factors are taken into account, including the owners' gender, age, profession, income, education, familiarity with pet insurance, and amount of money spent on pets, pets age, type of breed, size of pet, sleeping place of pet, number of visit to veterinarian, willing to pay for pet insurance, affordability and concern insured or not etc. A sample of 235 pet owners in Mysore was surveyed. Descriptive statistics, a reliability test, a factor analysis, a correlation analysis, and a regression test were used.

The majority of dog owners owning one dog and spend 2 hours per day. 51% of dog owners provide home cooked food to their pets. 46% of them allow their pet to sleep outdoor and 16% allows to sleeps in the bed room. When asked about the health history and number of visit to veterinarian of past one year of their dogs, 23% of pet owners have not at all visited veterinarian. The major illness of the dog was diarrhoea, Cancer, Ear infection, Obesity, Skin infection, Fractures due to accident, Bladder infection, Kidney disease, Bacterial infection, Distemper, Viral infection, Dental disease, Stiffness and Pain, Skin allergy, Kidney stone, Hip Dysplasia etc. 63% of dog owners were not aware of pet insurance and 89 percent of those surveyed said they would be willing to pay for pet insurance with the average amount of Rs.500 to 1000 premium. 90 percent of pet owners concur that the cost of veterinary care is a significant problem. 74% of dog owners agreed that veterinary expense causes financial stress. 70% of dog owners concerned about financial risk when pets got sick. 92% of dog owners have risk perception-fear to lose pet. 94% of dog owners anticipate that their pet will require medical attention in the future. A whopping 95% of dog owners feel that pet health insurance is just as necessary as human health insurance.

In light of the COVID-19 outbreak, 70% of pet owners agree that pet health insurance is necessary. The correlation analysis's findings reveal a perfect positive link between each variable. From the result of regression it is concluded that the dog owner characteristic is significant in impacting visit and expenditure at the veterinarian. The intention to get pet insurance is positively impacted by preventing financial risk from pet adoption. Hence lack of awareness, pet responsibility and willingness has significant effect purchase of pet health insurance.

#### 5. CONCLUSION

To the best of my knowledge, this study is the first to examine pet owners' knowledge of pet insurance, determine whether they are willing to pay for pet insurance, and assess veterinary visits and costs in Mysore (India). 74% of pet owners are not aware of pet insurance. I estimated that the majority of pet owners (88%) are prepared to pay for pet insurance. with the average premium of Rs.500 to 1000. 75% of dog owners say that veterinary care are costly and causes financial stress. Affordability to pay for veterinary services is a major concern and dog owners are concerned about financial risk when pets got sick also have risk perception-fear to lose pet and Expect your pet to require medical attention in the future. 95% of pet owners agree that pet health insurance is important as human health insurance and 73% agree that pet health insurance is needed in this covid-19 pandemic. There is a perfect positive correlation between all the variables. The result of regression proved the significant and non- significant impacts.

From the result of regression it is concluded that the dog owner characteristic is significant in impacting visit and expenditure at the veterinarian. The intention to get pet insurance is positively impacted by preventing financial risk from pet adoption. Hence lack of awareness, pet responsibility and willingness has significant effect purchase of pet health insurance.

There is virtually little knowledge of pet insurance among pet owners in Mysore. Therefore, raising awareness is the company's top objective in order to increase customer growth and willingness to pay for pet insurance, and one way to do this is through veterinarians. Future research on pet health insurance will build on the findings of this study. To better understand the owners' attitudes regarding pet insurance and to build better marketing and commercial strategies, more research should be done on the reasons for and obstacles to acquiring pet insurance. Analysis of how pet health insurance affects pet owner behaviour and the significance of plan features should also be included.

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