# Attribute Preferences of Term Insurance Plan among the Prospective Buyers: An Application of Conjoint Analysis

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Abstract: Term Insurance as the name suggests is a Life Insurance policy that is taken for a certain period or term in case of unfortunate death of the policyholder the sum assured is paid to the beneficiary nothing is paid out to the policyholder if he or she survives the policy term which makes term insurance a pure life insurance policy which can give you a very high cover for very low premium as compared to traditional life insurance policies. Due to dynamism and contingency in today's world, new products for Term insurance is in demand which have characteristics containing preferences of the customers in this segment. The purpose of this study is to explore the attributes that influence consumers on purchasing a term life insurance plan in India. The conjoint approach is used to analyse the new purchase decision of customer by taking into consideration of different attributes of the product or Plan. In the study sample is collected from the respondents who identified themselves as insurance decision-makers by taking term insurance. The customers are requested to rate the different profiles of the term life insurance policy included in the questionnaire. The consumer is selected using the Non-probability Judgmental sampling method. The Study concluded that the most important attributes of the Term insurance plan are Brand and payment options. However, the least important attributes of the term insurance plan are found to be sale channel, Term assured, and Rider benefits.

**Keywords:** Conjoint Analysis, Term Insurance Plan, Attributes, Rider, Term assured, Sale channel, Brand preference

#### INTRODUCTION

Term insurance is a type of life insurance policy. A type of life insurance policy that provides coverage for a certain period or a specification term of years if the insured dies during specified in the policy and the policy are active or in force then a death benefit will be paid it is usually best for more short-term coverage due to a sudden increase in liabilities and commitments or if the, in short, is confident that years down the road when the term expires, he or she will have no financial dependents or liabilities to be worried off.

Term insurance plan was introduced with a very basic structure plan that will offer death cover will cover for up to 65 years and premium can be paid in only the annual mode then as more insurer started offering online. Term insurance plans things started to become little complex today there is an unlimited pay plan increasing cover plan staged pay-out plan return of premium. Plans and dozen of the combination while this profusion of choice is good news it is also becoming a problem as most millenniums are unable to decide on which policy to buy. The aim of this paper to separate the wheat from the shaft and identified the most important attribute that consumers need to considered when buying a term insurance plan.

Review of literature: Dutta, G., Basu, S., & John, J. (2010) finds by using a logarithmic goal programming method that low premium is the major parameter for selecting life insurance corporation policies in the Indian market . Tati, R. K., & Baltazar, E. B. B. (2018) finds that tax saving is one of the most important factors which influence the investor while investing in the life insurance policy. Braun, A., Schmeiser, H., & Schreiber, F. (2016) conclude that the traditional pricing approaches, which still prevail in the insurance industry, are clearly inferior to the preference-based methodology .Fischer, I., & Buchenrieder, G. (2009) examines insurance preferences of rural farm households. And find that smallholders are very interested in livestock insurance. The 'insured animal' is that the most vital attribute for all respondents and therefore the buffalo is that the highest valued animal.Guan, L. P., Yusuf, D. H. M., & Ghani, M. R. A. (2020) concluded that the most important attributes for the customer for purchasing insurance policy are the price of the insurance policy, followed by product feature, promotion & distribution channel. Van den Berg, B., Van Dommelen, P., Stam, P., Laske-Aldershof, T., Buchmueller, T., & Schut, F. T. (2008) concluded that by using conjoint analysis that not only high risk but also low-risk individuals are willing to pay substantially more for insurance products which will provide them better health outcomes. Suneja, A., & Sharma, K. (2009) finds that promotional activities are major attributes while choosing a private insurance company as compared to the customer of public sector insurance company. Dominique-Ferreira, S. (2017) finds that the most important attribute of selecting non-life insurance is the price, followed by bundling strategy, the intermediary's recommendation, and the insurer's identity. Gupta, U., & Sinha, R. (2015) finds the demand for a home loan in India has been increasing due to the requirement of residential accommodation. The fixed rate of interest is the most important attribute that affects consumer buying behaviour towards the home loan. Yadav, B., & Tiwari, A. (2012) finds that while purchasing a life insurance policy the demographic factor of the population plays a very important role.

#### RESEARCH METHODOLGY

The purpose of this study is to explore the attributes that influence consumers on purchasing a term life insurance plan in India. The conjoint approach is used to analyse the preferences of the consumer for the buying term insurance plan. The conjoint questionnaire is designed using the SPSS questioner, which is a random selection of the possible profile of the different choices of the selected attributes of the term life insurance policies. The response of 90 consumers was collected, who identified themselves as insurance decision-makers. The customers are requested to rate the different profiles of the term life insurance policy included in the questionnaire. The consumer is selected using the Non-probability Judgmental sampling method. The responses are collected from customers with different demographic profiles, which are gender, age income, occupation.

#### DATA ANALYSIS AND INTERPRETATION

This section of the chapter examines the preference of the consumer, purchasing the term insurance plan in the Indian market concerning different selected attributes. Different attributes are trying to identify and included in the study. The objective of this analysis is to explore the preference of the customer for buying a term insurance plan from the life insurance market from India. The consumer buying Term insurance plan is not about putting

value in their life after all life is priceless, the key purpose of enrolling in a Term insurance plan is to provide adequate financial resources to their dependents who can provide for themselves if they were to meet an untimely death in. There is a need to understand the perception of Indian consumers towards the term insurance plan. In order to fill this objective conjoint analysis is the plan to apply for the analysis. The conjoint analysis helps in explaining the preference of the buyer for the various attributes of the Term insurance plan. The Conjoint analysis starts with identified the foremost preferred attributes of the insurance plan. The identified factors of the term insurance plan are – Brand, Sales channel, Term assured, Rider. These attributes are found to be measured attributes on the idea of a literature survey and discussion with the customer. The next step of conjoint analysis is to identify the various choices available with attributes having a greater number of choices, however, may have fewer choices. the combination of attributes of the term insurance plan besides the selected choices, however, others may have fewer choices. The combination of choices within each attribute is known as the conjoint layout. In this study Conjoint layout representation different selected attributes at the side of selected choices term insurance plan is shown below within the table:

Tale: Conjoint Layout

Attributes -→	Brand	Sales Channel	Payment Option	Term Assured	Rider
Options-→	Well know Insurer	Online	Yearly	15	Yes
			Half yearly	20	
	Lesser-known Insurer	Offline	Quarterly	25	No
			Monthly	30	

With the help of the above-mentioned selected attributes and choice of Term Insurance plan, a questioner (for conjoint approach ) is developed for the data collection in the study. This conjoint questioner includes the different profiles consisting of the different choices of the term insurance plan. The response of 90 consumers was collected, who identified themselves as insurance decision-makers. The consumers selected for the study were requested to provide their ratings for the different mention profiles of Term Insurance plan with given combination of choices of Term Insurance plan .The ratings of term Insurance plan profiles are on a scale of 1 to 10 where , 1 represents the least preferred profile of Term Insurance plan and 10 represent most preferred of Term Insurance plan .

The details of the Term Insurance profiles selected for conjoint questioner are shown below:

#### **Profiles**

Card	Brand	Sales	Payment	Term	Rider	Rating
ID			Option	Assured		
1	Lesser know Insurer	Personal	Yearly	25	Yes	
2	Well know Insurer	Online	Yearly	25	Yes	
3	Well know Insurer	Online	Yearly	30	Yes	
4	Well know Insurer	Online	Monthly	20	No	
5	Well know Insurer	Online	Yearly	20	No	
6	Well know Insurer	Personal	Quarterly	25	Yes	
7	Lesser know Insurer	Online	Quarterly	30	Yes	
8	Well know Insurer	Personal	Quarterly	20	Yes	
9	Well know Insurer	Personal	Monthly	30	Yes	
10	Well know Insurer	Personal	Half yearly	15	Yes	
11	Lesser know Insurer	Personal	Yearly	30	No	
12	Well know Insurer	Online	Half yearly	25	No	
13	Lesser know Insurer	Personal	Half yearly	20	Yes	
14	Lesser know Insurer	Online	Quarterly	15	No	
15	Well know Insurer	Personal	Half yearly	30	No	
16	Well know Insurer	Personal	Monthly	15	Yes	

The multiple regression model with different dummies as the independent variable is applied . In the regression model the estimated average of ratings collected from the Term insurance buyer is considered as dependent variable and different choices of term insurance attributes are assumed to be different independent variable . The multiple regression model is shown below:

$$Rating = \alpha + \beta_{1i}X_{1i} + \beta_{2i}X_{2i} + \beta_{3i}X_{3i} + \beta_{4i}X_{4i} + \beta_{5i}X_{5i}$$

Where the rating is the dependent variable and the dummies of the choices of the Term insurance attributes are considered as independent variable in the regression model . The result of regression model shown below :

Table: Regression Model for Conjoint

Dependent	Independent Value	Regression	T Statics	F State	R2
Variable		Coefficient	P Value	P Value	
Customer	(Constant)	6.804	25.20 (.000)		
Rating	Brand Lesser Know Insurer	-1.019	-5.925 (.001)		
Tutting	Sales Channel Online	.034	.202 (.847)		
	Payment Option Half yearly	076	357 (.733)		
	Payment Option Quarterly	222	-1.111 (.309)	]	
	Payment Option Monthly	519	-2.114 (.079)	4.570	87.3 %
	Term Assured 20	024	106 (.919)		
	Term Assured 25	177	734 (.490)		
	Term Assured 30	006	029 (.978)		
	Rider No	050	298 (.776)		

The cardinal utilities of all the choices of the attributes of Term insurance in the conjoint layout can be estimated with the help of following equation:

# For the attributes "Brand"

a1+a2 = 0

a2 - a1 = -1.019

#### For the attributes "Sales Channel"

b1+b2 = 0

b2-b1 = .034

# For the attributes "Payment Option"

c1+c2+c3+c4=0

c2-c1 = -0.76

c3-c1 = -0.222

c4-c1 = -0.519

## For the attributes "Term Assured"

d1+d2+d3+d4=0

d2-d1 = -.024

d3-d1 = -.177

d4-d1 = -.006

## For the attributes "Rider"

e1+e2 = 0

e2-e1 = -.050

The cardinal utilities of the selected choices of the Term Insurance attributes in the conjoint layout calculated with the help of above mention mathematical equation are mention below:

Attributes	Choices	Utilities	Remark
Brand	Well know brand	0.5095	
	Lesser know brand	-0.5095	Highest in Brand
Sales Channel	Personal	-0.017	
	Online	0.017	Highest in Sales Channel
Payment Option	Yearly		Highest in Payment
		0.20425	Option
	Half yearly	0.12825	
	Quarterly	-0.01775	
	Monthly	-0.31475	
Term assured	15	0.05175	Highest in Term assured
	20	0.02775	
	25	-0.12525	
	30	0.04575	
Rider	Yes	0.025	Highest in Rider
	No	-0.025	

The result of the conjoint analysis indicates that in the case of the attribute Brand preference of the consumer while purchasing a Term Insurance plan, the well-known-insurer company is found to have the highest positive cardinal utility of 0.5095. This can be concluded from the result that the consumer, by nature, generally avoid risk and seek safety. This may be due to the reason that a well-known- insurer company offers them safety and reduce the risk of disappointment. The relative importance of a consumer's brand preference is found to be 57% while purchasing a Term insurance plan. Similarly, in the case of the payment option, the choice of 'Yearly' premium payment was found to have the highest positive cardinal utility of 0.20425 followed by the 'half-yearly' (0.12825) premium payment option. The cardinal utility is found to be negative in the case of choice of quarterly(-0.01775) and monthly(-0.31475) premium payment option. This can be concluded from the result that consumer is preferred to pay yearly and half-yearly premium instalment rather than a quarterly and monthly instalment of premium. The relative importance of the payment options category is found to be 29% which is lower as compared to the Brand as estimated. In the case of the sales channel, the consumer has positive utility with the online channel (0.017) as compared to the personal channel (-0.017). Similarly, in the case of Rider benefit the consumer have positive utility with having rider benefit (0.025) as compared to not having the rider benefit (-0.025). In the case of the Term assured category the choice of a 15-year term plan is found to have the highest positive cardinal utility of 0.05175 followed by the 30-year (0.04575) and (0.02775) year term plan. The utility is found to be negative in the case of the choice of a 25-year term plan (-0.12525).

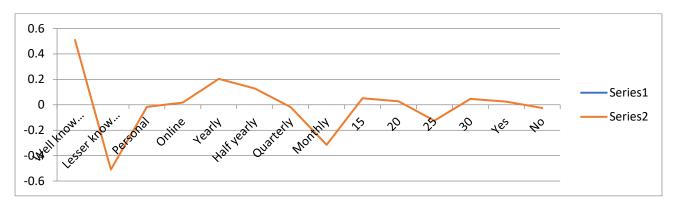


Table: Cardinal Utilities of different choices of Term Insurance attributes

The relative importance of the different Term Insurance attributes is shown below in the table :

Table: Relative Importance of Term Insurance attributes

Attributes	Range	Relative Importance
		(in percentage value)
Brand	1.019	57%
Sales Channel	0.034	2%
Payment Option	0.519	29%
Term assured	0.177	10%
Rider	0.05	3%
Total	1.799	100 %

The result shows that the most important attribute for a consumer when purchasing a Term insurance plan is the brand (57%), followed by the payment option (29%), and Term assured(10%), and the rider (3%). However, sales channels (2%) are the least important attribute for a consumer while purchasing Term insurance plan.

#### **CONCLUSION**

It is concluded in the study that in the case of attributes Brand image of term insurance plan, the choice well-known insurer is found to have the highest positive cardinal utility. However, in the case of the choice of the lesser-known insurer the cardinal utility is found to be negative. This can be concluded from the result that the consumer, by nature, generally avoid risk and seek safety. This may be due to the reason that a well-known- insurer company offers them safety and reduce the risk of disappointment. The relative importance of a consumer's brand preference is found to be 57%. Similarly, in the case of the payment option, the choice of 'Yearly' premium payment was found to have the highest positive cardinal utility followed by the 'half-yearly 'premium payment option. The cardinal utility is found to be negative in the case of choice of quarterly and monthly premium payment options. This can be concluded from the result that consumer is preferred to pay yearly and

half-yearly premium installment rather than a quarterly and monthly installment of premium. The relative importance of the payment options category is found to be 29% which is lower as compared to the Brand as estimated. In the case of the sales channel, the consumer has positive utility with the online channel as compared to the personal channel. Similarly, in the case of Rider benefit the consumer have positive utility with having rider benefit as compared to not having the rider benefit. In the case of the Term assured category the choice of a 15-year term plan is found to have the highest positive cardinal utility followed by the 30-year and 20-year term plan. The utility is found to be negative in the case of the choice of a 25-year term plan. Further, the most important attributes of the Term insurance plan are Brand and payment options. However, the least important attributes of the term insurance plan are found to be sale channel, Term assured, and Rider.

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