



UNDERSTANDING THE INSURANCE LITERACY ROLE BEHIND THE PURCHASE OF INSURANCE: BEHAVIORAL STUDY OF INSURANCE PURCHASE DECISIONS OF WOMEN

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ABSTRACT

Background of the Study: The extant literature on life insurance in India is mostly descriptive in nature, with a few empirical studies that have looked at literacy and awareness for the insurance and related terms among the women and resulting into insurance demand. In this context the impact of literacy or awareness on the behavior in insurance market has remained largely unexplored. Given the low levels of insurance penetration and its critical role in increasing financial wellbeing, it is important to understand the insurance purchase behaviors of Indians particularly women. There are several issues that are of interest, the level of financial literacy and awareness, the level of social influence in the purchase decision, understanding the motivations behind the purchase and understanding whether the existing insurance providers are meeting the needs of the consumer. So, this research work is aimed to explore the relative association in between the literacy for insurance and the purchase decision of working women. This is the primary motivation for this study. **Research Methods:** Universe of research work was the working women of public and private institutions of different organized sectors, but in order to conquer the research limitations may taken place just because of the wider geographical scope, the geographical scope for the present research was restricted up to the organized public and private sector institutions of Rajasthan, Delhi, Uttar Pradesh and Gujarat states of India. The responses derived from the duly filled questionnaires received from 2034 women working in different institutional setups were encoded and statistically analyzed to determine their literacy for insurance as motivating factor which drive them to purchase insurance. Testing of the significance or insignificance of the hypotheses was statistically performed through Ordinary Least Squares (OLS) Regression Test with Standard Errors (S.E.). **Experiential Conclusions:** Statistically it was confirmed that the relative association between the sector (Public and Private) of organization with which working women is associated and insurance literacy determinants significantly affect the working women's insurance purchase decisions and attitude. The empirical results drawn helped to recognize that there is peer need to work on developing effective insurance literacy interventions which can be driven through individual knowledge and skill and insurance company interventions.

KEYWORDS : Insurance Literacy, Awareness, Purchase Decision, Motivation Factors, Customer Needs

INTRODUCTION

With the several women empowerment schemes the status of women particularly in context to their literacy level in India has been improved noticeably (knowindia.india.gov.in) and resulting into the accelerated contribution in the economic development. The role of women in inclusive growth of the economy is imperative and demanding for more active participation in economy through banking, insurance and other financial activities. Even it is also noticed that the active role of women in now days not restricted with making the purchase decisions for groceries and other households, rather it is expanded with making the decisions for overall family well-being activities such as investment decisions, purchase of insurance, decision about the schooling of children, and many more.

Hence, particularly in context to purchasing the insurance products and services, role of the women in families becoming more sophisticated as perception of women for protection or precaution from the uncertainties is quite different as women are more concerned about the financial security through proper and planned investment in form of insurance (Omar & Owusu-Frimpong, (2007).

With this fact of increasing literacy level of the women of India, women become more inclined towards increasing their level of understanding and awareness for the financial and insurance products and services. Even, government and several public and private sector institutions are also showing their inclination towards enriching the consumers' level of understanding and comprehensive knowledge particularly in the women of the society about the financial and insurance products and services because greater understanding leads into directed decision-making (Driver et al., 2018). In order to make the women more financially empowered, insurance is one of the critical components that may help the insured through absorbing the financial uncertainties caused due to any personal reason such as health, death etc. So, with an adequate insurance product and service one can ensure their financial viability or sustainability even in any adverse situation (Wanczeck et al., 2017).

It can easily be observed nearby us that most of the women are uninsured and the reason is they do not have any knowledge about the insurance products and services followed with its associated benefits and against to it most of the male members have greater knowledge

about it. So, the hardship can happen to anybody, it is not gender dependent and any unavoidable financial and health hardships can affect the financial status of the family, particularly when it occurs with the bread earner of the family. So, insurance is one of such tools which offer financial support to the individual and family in any such hardship states (Driver et al. (2018);

Tennyson (2011); Lin et al. (2019)). It is been acclaimed by Lin et al. (2019) that the individual with the good awareness level followed with the insurance literacy is more active in availing the insurance policy with appropriate coverage of the risk and financial aspects of the family. It is also mentioned that insurance literacy is quite different than to the financial literacy, so, it is required to make the people aware with the insurance explicitly and exclusively, whereas the awareness and literacy for the essentiality of insurances in economic and financial sustainability of the individual and family is quite low (Bristow & Tennyson, 2001).

It is not because of that the people do not know about the insurance, it is because of the lack of understanding for the procedure of claim, cost associated, complicated paper work etc., therefore commonly people prefers only those insurance which do not carry complications in the procedural part and somehow enforced by the law such as motor vehicle insurance. Other than this some people prefer general insurances than to the personal insurances due to difference of interest in physical assets.

It is well defined and acclaimed by the researchers that exploring the variables that can drive consumer decision making under uncertainties and risks is quite complex to understand and task to measure their extent is quite difficult. It is also noticed that buying decision of any financial product or service particularly insurance involves behavioral biasness rather than the rationality in decision making (Shanteau, J. (1992); Sum, R.M., & Nordin, N. (2018); Kusev (2017)). So, the rationality in making the decision for purchasing the insurance can be driven through the level of literacy related to the insurance and related aspects. According to the available literature, it was noticed that commonly the literacy for the insurance among the customers is low, and most of time their purchase decision is driven through the close contact and the insurance agent. This research work is conceptualized to explore the role of insurance literacy among the working women on

their insurance purchase decision. Driver et al. (2018) mentioned that knowledge about the insurance policy lead into subsequent trust over the policy and also helps to escape from the disadvantageous effect of behavioral aspects on making the decisions for insurance. According to Kahneman & Tversky (1979) process of decision making is driven and affected through behavioral biasness and non-rational outcomes. The same kind of the behavior decision justification can be identified for the purchasing decisions of the insurances. Particularly, in context to the insurance people may be scared of an incidence rather than the financial impact of the incidence. So, that the insurance purchase decision is driven by the probability of happening the loss (Shanteau (1992); Kunreuther (1979)). Hence, the role of literacy is very crucial in insurance purchase decisions.

Literacy about the insurance products, services, procedures, practices, benefits and claim settlement etc jointly can be termed as "Insurance Literacy" but it should also incorporate the awareness, knowledge, and cognitive abilities followed with the directed behavior and factors that can enable all the desirable characteristics holistically. In order to make the customer literate about the insurances, a well structured program should incorporate all set of information about the product, service and sector followed with the assistance sessions which can help the customer to identify the risk associated with the different dimensions and value of insurance, and how the insurance can lead into drawing the successful outcome from the policy. Some such literacy programmes may result into behavior biasness and few may help to establish the ideology about the insurances into the customers' mindset. In spite of the significance of Insurance Literacy Program to make the people aware and ignite their cognitive skills, only few studies have been done in this regard, particularly for the impact of insurance literacy effect on the insurance purchase decision (Tennyson (2011); Wanczeck et al. (2017); McCormack et al. (2009); Peterlechner, L. (2017); CoreData (2014)). It is also noticed that Insurance literacy is not restricted up to certain extent of literacy about the insurance; it also incorporates development of all sets of necessary skills and knowledge set in the customer for making a final decision about the purchase of insurance (Lusardi and Mitchell (2014)). Furthermore, few researches recommended the need of studying the studies over the insurance literacy particularly about the level of insurance literacy and its impact on their insurance purchase decision (Driver et al. (2018); Tennyson (2011); Uddin, M.A. (2017)). As identified by the Driver et al. (2018), one of the major causes of the underinsurance is insurance literacy and higher literacy may lead into higher understanding for the need of insurance and that finally reached to making a decision for purchasing insurance. So, the ultimate objective of making people literate for insurance is to drive behavioral change within them towards the positive acceptance and better exploration of insurance products for overall financial well-being in any adverse situation (Wells et al. (2015)).

So, that the present research work is aimed to explore the effect of insurance literacy on the insurance products and services' purchasing behavior of working women respondents of the four states of India. In context to the other researches performed over the comparable variables namely insurance literacy, purchase decision, behavior etc, this research work is more detailed and comprehensive by the variability ensured in the sample determination and the framework followed for the exploring the effect of insurance literacy on the insurance purchasing decisions of the working women of different public and private enterprises of the four different states (Rajasthan, Delhi, Uttarpradesh and Gujarat) of India.

The paper content is prearranged in the following order: Section first discussed the brief introduction and the relevant literature. The next section incorporate the research design adopted, followed by the statistical analysis and interpretations, and lastly, the conclusion and discussion, together with and future research directions.

RESEARCH DESIGN

Hence, this research work proposed to add the explanatory insight into the effect of insurance literacy on working women's insurance purchase decision. The notional relationship that subsists, in between insurance purchase decision, insurance literacy and several aspects of the benefits, risks and perception of working women as presented in the literature above following research questions are addressed:

1. Does the sector (Public and Private) of organization with which women is associated affects their insurance literacy driven insurance purchase decisions and attitude?

2. Does the Insurance Literacy of working women's affect their insurance purchase decisions and attitude?

A: Objective of Research and Hypotheses: From research questions, twofold objectivity could be identified for this research work. The first point of view is to depict the inclusive image of insurance literacy and purchase behavioral variables corresponding to the insurance purchase decision and attitude of the working women of the different public and private sector organizations. Another point of view of study is to determine the effect of working women's sector of organization working with and insurance literacy driven insurance purchase decision and attitude. Particularly, this study would be competent to substantiate the associated hypotheses:

H₀₁: Insurance Product and Organization induced insurance literacy guided insurance purchase decision can affect working women's insurance purchase decisions and attitude.

H₀₂: Insurance Literacy of the working women can decidedly affect every possible aspect of working women's insurance purchase decisions and attitude.

B: Data: For this primary data based survey technique based research work, working women's responses for their insurance literacy and insurance purchase decisions was collected through a well structured questionnaire administered online through Google forms application. The questions presented in the survey questionnaire were addressed to the aforementioned issues related with the insurance literacy guided working women's attitude for the insurance and its effect on their insurance purchase decision. The questionnaire was distributed online to the public and private sector working women of the four different states namely Rajasthan, Delhi, Uttar Pradesh and Gujarat states of India. Most of the working women sampled for the study purpose were from the middle income class families, because most of the consumer focused business middle income class consumers are the key target. Further, some researches claims that middle income class family people are more concerned about the family safety and security, future plans, awareness for health, sensitivity for the financial health and also have rationale for their spending habits (Kharas (2010); Wickramasinghe & Pranava (2013)).

Multistage, stratified and random sampling method was used for the purpose of sampling the working women respondents from the middle income strata. Relating to sample size, Churchill (2005) asserted that for the studies related to the consumer behavior sample size should be in between 200 to 500. For the present research work, due to the availability of the sample population of working women of different sectors a certain variation was observed in the targeted population from each participating state i.e. 600. Hence, final number of working women respondent participated in the research is, from Rajasthan 570, from Delhi 530, from Uttar Pradesh 550 and from Gujarat 600 in conclusion selected as the sample of study. So, total populations of 2250 working women respondents were selected as the participant of the research on the basis of numerous criteria of sampling and final interaction with them over the set of questions related to insurance literacy effect on their behavior aspects which lead into making the final decision of purchasing the insurance. In order to the draw more focused outcomes and feedbacks over the set of questions administered around insurance literacy, behavioral effect of the insurance literacy, purchase decision and attitude for the insurance, working women of the 30-60 years of age group were chosen and incorporated as participants of the study. 30-60 Years of age groups is considered as the most active workforce group for both male and female with sufficient purchasing power and ability of making the decision of purchasing (Rizomyliotis et al. (2018); Quoquab (2017)). Incomplete and omitted feedbacks given from the women participants (Not duly filled questionnaire) were kept out from the encoding and comprehensive analysis required for the research objective. Total number of responses of women respondents excluded was 216 (9.6%), and that resulted into the final sample size of the study into 2034 working women and only their feedbacks were recorded for purpose of detailed analysis (Table 1).

Table 1: State wise Working Women Frequency Distribution

| State (s) | Target N | % | Expelled % | Net N | Net % | |
|-----------|----------|------------|------------|-------|-------|------------|
| Rajasthan | 570 | 25.3333333 | 45 | 2 | 525 | 25.8112094 |
| Delhi | 530 | 23.5555556 | 54 | 2.4 | 476 | 23.4021632 |

| | | | | | | |
|---------------|------|------------|-----|-----|------|------------|
| Uttar Pradesh | 550 | 24.4444444 | 72 | 3.2 | 478 | 23.5004916 |
| Gujarat | 600 | 26.6666667 | 45 | 2 | 555 | 27.2861357 |
| Total | 2250 | 100 | 216 | 9.6 | 2034 | 100 |

Source: Descriptive Statistics Result

C: Measurement and Scaling of the Variables: Questions depicting the diverse characteristic of insurance literacy, behavioral effect of the insurance literacy, purchase decision and attitude for the insurance were scaled on 4 item scale (Ajzen, (2002)) and 5 point basis. Women participants have to give their opinion for questions administered on both the scales in between highest to least set of agreement. For managing the normality of the distribution of the responses given by the women respondents, the responses were broadly dichotomized into two different subsets namely Above Average (Representing Good and Very Good) and Below Average (Representing Bad and Very Bad). Following demographic variables were incorporated in the questionnaire to know different class category characteristics of the working women participants:

- Age: Different Age Groups (in Years) are 30-40, 41-50 and 51-60
- Marital Status (Civil Status): Different Civil Status are Single / Widowed and Married / Cohabit
- Number of Dependents: Different Number of Dependents in the Family are: <2, 2 to 4 and >4
- Sector of Industry: Working women is working with Public or Private Sector
- Educational Status: Different Educational Backgrounds are Below Graduate and Above Graduate
- Income (Monthly): Different Income Groups (Amount in Rs.) < 30000, 31000-40000, 41000-51000 and > 51000
- Occupation: Different Occupation Type are Government, Private, Self-Employed, Unemployed
- Locale: Different locality to which women respondents belongs are Urban, Semi-Urban and Rural

D: Data Analysis: In order to determine the internal reliability and consistency of the dataset reliability tests are performed, for the purpose of reliability analysis for the present dataset, Cronbach's alpha reliability test was performed. Descriptive test was performed to know the class specific distribution of women respondents for each demographic or personal variable. Furthermore, to determine relativity between diverse characteristic of insurance literacy, behavioral effect of the insurance literacy, purchase decision and attitude for the insurance SEM was performed to check the significant cases through Cook's distance, because SEM is the most preferable test method for parametric evaluation and structural relations based hypothesis testing (Rezaei, 2015). Additionally, for sector with which the working women is associated specific relative association determination between the personal and insurance company driven interventions, and purchase decision and attitude for the insurance of the working women respondent, multivariate test was performed adjusting the individual and working characters. Variables driven SEM followed with the PLS is most commonly used by the researchers (Henseler & Chin (2010); Reinartz et al. (2009); Hair (2011); Sarsted (2008); Rezaei, S. (2015)) in behavioral studies.

ANALYSIS RESULTS AND INTERPRETATIONS

A. Reliability Test Results: To measure the reliability and internal consistency of the dataset of working women respondents' opinion for characteristic of insurance literacy, behavioral effect of the insurance literacy, purchase decision and attitude for the insurance was measured through Cronbach's alpha (α) reliability test. The internal reliability of the dataset is measured through the alpha (α) value of the test; higher alpha (α) value represents good variability for the dataset and confirms that further statistical tests can be performed over the dataset. For two different scales presenting the women respondents' opinion for the Insurance Literacy driven Behavior effect on Purchase Decision and Attitude namely "Insurance Purchase Decision - IPD" (α -Value = 0.86) and "Insurance Purchase Attitude - IPA" (α -Value = 0.82) observed good variability and reliability for the feedbacks given by the sampled working women respondents (Table 2). For the different statements of Psychophysical Interventions and statements of Need and Self-Explanatory Interventions of Insurance Literacy Driven Purchase Decision and Attitude through Individual Interventions, Higher alpha (α) values were observed ("Psychophysical Interventions - PI" (α -Value = 0.78) and "Need and Self-Explanatory Interventions - NSI" (α -Value = 0.81)). For the different statements of

Company Practices for Literacy Interventions, Staff and Agent Interventions and Document and Information Environment Interventions of Insurance Literacy Driven Purchase Decision and Attitude through Insurance Company Interventions Higher alpha (α) values were observed ("Company Practices for Literacy Interventions - CPLI" (α -Value = 0.79), "Staff and Agent Interventions - SAI" (α -Value = 0.83) and "Document and Information Environment Interventions - DIEI" (α -Value = 0.77)). For Insurance Literacy determinants (α -Value = 0.92) reliability is found greater than 0.70 (Table 2).

Table 2: Reliability and Validity Test: Cronbach's Alpha (α) Test Statistics

| Variable Scale | Variable Scale Code | α - Value |
|--|---------------------|------------------|
| Insurance Literacy driven Behavior effect on Purchase Decision and Attitude | | |
| Insurance Purchase Decision | IPD | 0.86 |
| Insurance Purchase Attitude | IPA | 0.82 |
| Insurance Literacy Driven Purchase Decision and Attitude – Individual Interventions | | |
| Psychological Interventions | PI | 0.78 |
| Need and Self-Explanatory Interventions | NSI | 0.81 |
| Insurance Literacy Driven Purchase Decision and Attitude – Insurance Company Interventions | | |
| Company Practices for Literacy Interventions | CPLI | 0.79 |
| Staff and Agent Interventions | SAI | 0.83 |
| Document and Information Environment Interventions | DIEI | 0.77 |
| Insurance Literacy Determinants | | |
| Insurance Literacy | IL | 0.92 |

Source: Results Output of Cronbach's Alpha (α) Test Statistics

B. Profile of the Working Women Respondents - Descriptive Test Results: Descriptive Statistics mainly incorporating mean, standard deviation and frequency distribution percentage statistics of the working women participants' demographic or personal information variables can be obtained through the statistics presented in the Table 3. From the mean and standard deviation statistical values presented in the Table 3 following interpretations can be drawn for the Rajasthan, Delhi, Uttar Pradesh and Gujarat women participants' demographic variables:

1. Somewhere the observable difference is found in mean and standard deviation values for age variable where highest mean score was observed for the Rajasthan (2.26±1.16) and the lowest mean score was observed for the Uttar Pradesh (1.87±0.97). Same difference is observed for marital status where highest mean score was observed for the Gujarat (1.7363±1.02) and the lowest mean score was observed for Uttar Pradesh (1.43±0.98). For Occupational status the difference was also high, where highest mean score was observed for the Uttar Pradesh (2.5199±1.02) and the lowest mean score was observed for Rajasthan (2.03±0.79).

2. For the other remaining demographic variables no significant observable difference is found in mean and standard deviation values such as for number of dependents variable highest mean score was observed for the Rajasthan (1.76±0.96) and the lowest mean score was observed for the Uttar Pradesh (1.55±0.79). For sector of industry highest mean score was observed for the Delhi (1.74±0.79) and lowest mean score was observed for Gujarat (1.60±0.87). For Educational status highest mean score was observed for the Gujarat (1.88±0.87) and lowest mean score was observed for Uttar Pradesh (1.82±0.96). For monthly income highest mean score was observed for the Delhi (2.34±0.77) and lowest mean score was observed for Uttar Pradesh (2.11±0.75). For living locale highest mean score was observed for the Rajasthan (1.89±0.95) and lowest mean score was observed for Uttar Pradesh (1.78±0.79).

So, from the variability in the mean and standard deviation value it could conclude that a balanced participation of working women participations was observed from Rajasthan, Delhi, Uttar Pradesh and Gujarat. Higher standard deviation values confirmed the greater

variability in the different classes of the demographic variables which confirms that data is not led by particular class women participants.

Table 3: Descriptive Statistics of Working Women Participants' Demographic Variables

| State | Rajasthan | | Delhi | | UP | | Gujarat | |
|--------------------|-----------|-----------|-----------|-----------|--------|--------|---------|--------|
| | [N = 525] | [N = 476] | [N = 478] | [N = 555] | Mean | SD | Mean | SD |
| Age (in Years) | 2.2663 | 1.16 | 2.0879 | 1.09 | 1.8739 | 0.97 | 2.0237 | 1.02 |
| 30-40 | 66 | 3.24% | 66 | 3.24% | 105 | 5.16% | 89 | 4.38% |
| 41-50 | 306 | 15.04% | 266 | 13.08% | 255 | 12.54% | 292 | 14.36% |
| 51-60 | 153 | 7.52% | 144 | 7.08% | 118 | 5.80% | 174 | 8.55% |
| Marital Status | 1.7326 | 1.03 | 1.4869 | 1.07 | 1.4326 | 0.98 | 1.7363 | 1.02 |
| Single/ Widowed | 209 | 10.28% | 197 | 9.69% | 208 | 10.23% | 178 | 8.75% |
| Married/ Cohabit | 316 | 15.54% | 279 | 13.72% | 270 | 13.27% | 377 | 18.53% |
| No. of Dependents | 1.7635 | 0.96 | 1.7426 | 1.03 | 1.5563 | 0.79 | 1.6598 | 0.93 |
| < 2 | 267 | 13.13% | 277 | 13.62% | 239 | 11.75% | 335 | 16.47% |
| 02 to 04 | 150 | 7.37% | 149 | 7.33% | 129 | 6.34% | 166 | 8.16% |
| 4+ | 108 | 5.31% | 50 | 2.46% | 110 | 5.41% | 54 | 2.65% |
| Sector of Industry | 1.6425 | 0.74 | 1.7426 | 0.79 | 1.6239 | 0.87 | 1.6035 | 0.87 |
| Private | 381 | 18.73% | 366 | 17.99% | 351 | 17.26% | 416 | 20.45% |
| Public | 144 | 7.08% | 110 | 5.41% | 127 | 6.24% | 139 | 6.83% |
| Education Status | 1.8756 | 0.89 | 1.8746 | 0.69 | 1.8236 | 0.96 | 1.8863 | 0.87 |
| Below Graduate | 122 | 6.00% | 109 | 5.36% | 149 | 7.33% | 137 | 6.74% |
| Above Graduate | 403 | 19.81% | 367 | 18.04% | 329 | 16.18% | 418 | 20.55% |
| Income (Monthly) | 2.1998 | 1.01 | 2.3426 | 0.77 | 2.1139 | 0.75 | 2.2638 | 1.09 |
| < Rs. 30000 | 165 | 8.11% | 149 | 7.33% | 139 | 6.83% | 167 | 8.21% |
| Rs.31000-Rs.40000 | 205 | 10.08% | 187 | 9.19% | 196 | 9.64% | 210 | 10.32% |
| Rs.41000-Rs.50000 | 55 | 2.70% | 51 | 2.51% | 66 | 3.24% | 62 | 3.05% |
| > Rs. 51000 | 100 | 4.92% | 89 | 4.38% | 77 | 3.79% | 116 | 5.70% |
| Occupation Type | 2.0368 | 0.79 | 2.2850 | 0.87 | 2.5199 | 1.09 | 2.2892 | 0.77 |
| Government | 144 | 7.08% | 110 | 5.41% | 127 | 6.24% | 139 | 6.83% |
| Private | 180 | 8.85% | 196 | 9.64% | 169 | 8.31% | 205 | 10.08% |
| Self-Employed | 155 | 7.62% | 123 | 6.05% | 115 | 5.65% | 149 | 7.33% |
| Unemployed | 46 | 2.26% | 47 | 2.31% | 67 | 3.29% | 62 | 3.05% |
| Living Locale | 1.8987 | 0.95 | 1.7836 | 0.79 | 1.8968 | 0.82 | 1.8192 | 0.79 |
| Urban | 152 | 7.47% | 135 | 6.64% | 154 | 7.57% | 149 | 7.33% |
| Semi-Urban | 263 | 12.93% | 247 | 12.14% | 249 | 12.24% | 406 | 19.96% |

| | | | | | | | | |
|-------|-----|-------|----|-------|----|-------|-----|-------|
| Rural | 110 | 5.41% | 94 | 4.62% | 75 | 3.69% | 116 | 5.70% |
|-------|-----|-------|----|-------|----|-------|-----|-------|

Source: Result Output of Descriptive Statistic Test

It was also noticed that highest participation from the different age groups was observed from women respondents of 40-50 years, and this is commonly identified for women participants of all the four states. For marital status greater percentage women respondents were found married/ cohabit, for number of dependents it was observed that highest participation was observed from the women group having less than 2 dependents, for sector with women are associated it was noticed that greater participation was observed from the private sector women respondents, in context to the educational qualification it was observed that good number of women respondents are qualified and having more than graduate degree qualification. Highest participation was observed from the Rs. 31000 to Rs. 40000 income group women, and it was also observed that greater number of women respondents was working in private sector and secondly prefers to be self-employed. From the living locale it was noticed that most of the women participants were from semi-urban area, it is because study was focused over the middle income class women.

C. SEM Test Results: Assessment of the measurement model is done through the Convergent validity analysis (Hair et al. (2014); Hair et al. (2019)) and Discriminate Validity (Fornell & Larcker (1981)). Convergent Reliability is confirmed when the average variance extracted value is found > 0.50 and composite reliability is found > 0.7. For all the constructs AVE values are found greater than 0.50 and CR values are also found greater than 0.7, so for constructs have sufficient convergent and composite reliability validity (Table 4).

Table 4: Convergent Reliability

| Construct | AVE | CR | CA |
|--|-------|-------|-------|
| Insurance Purchase Decision | 0.818 | 0.886 | 0.863 |
| Insurance Purchase Attitude | 0.748 | 0.843 | 0.821 |
| Psychological Interventions | 0.614 | 0.792 | 0.784 |
| Need and Self-Explanatory Interventions | 0.639 | 0.861 | 0.813 |
| Company Practices for Literacy Interventions | 0.742 | 0.816 | 0.792 |
| Staff and Agent Interventions | 0.672 | 0.863 | 0.833 |
| Document and Information Environment Interventions | 0.587 | 0.812 | 0.774 |
| Insurance Literacy | 0.879 | 0.945 | 0.921 |

Source: Convergent Reliability Test (CR= Composite Reliability; CA = Cronbach's Alpha)

The empirical results of the discriminant validity also confirms sufficient discriminant validity, as square root of AVE for constructs are found higher than the correlation values of any latent variable (Table 5)(Fornell & Larcker (1981))

Table 5: Discriminant Validity

| Construct | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.805 | - | - | - | - | - | - | - |
| 2 | 0.706 | 0.712 | - | - | - | - | - | - |
| 3 | 0.695 | 0.663 | 0.657 | - | - | - | - | - |
| 4 | 0.729 | 0.523 | 0.613 | 0.897 | - | - | - | - |
| 5 | 0.760 | 0.669 | 0.523 | 0.746 | 0.757 | - | - | - |
| 6 | 0.733 | 0.701 | 0.603 | 0.763 | 0.609 | 0.618 | - | - |
| 7 | 0.629 | 0.675 | 0.598 | 0.812 | 0.712 | 0.596 | 0.759 | - |
| 8 | 0.636 | 0.659 | 0.589 | 0.776 | 0.667 | 0.536 | 0.639 | 1.000 |

Source: Discriminant Validity Test (1= Insurance Purchase Decision; 2 = Insurance Purchase Attitude; 3 = Psychological Interventions; 4 = Need and Self-Explanatory Interventions; 5 = Company Practices for Literacy Interventions; 6 = Staff and Agent Interventions; 7 = Document and Information Environment Interventions; 8 = Insurance Literacy)

Structural Equation Modeling (SEM) is helpful to determine the associative relationship in between for characteristic of insurance literacy, behavioral effect of the insurance literacy, purchase decision

and attitude for the insurance. From the empirical result presented in Table 6 no negative relative associations were identified in between the aforementioned variables. The positive associations depicted good Bayesian Information Criterion (BIC). The resultant values of all the participating variables as exogenous and endogenous are presented in

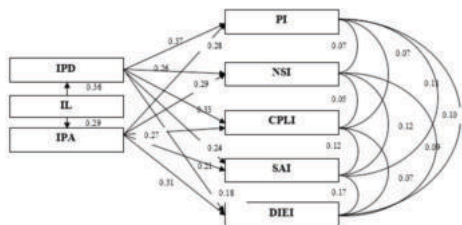
Table 6.
Table 6: BIC Values in Percentile

| Variables | | δ BIC | Parameters | Bootstrap Q _{2.5%} , Q _{97.5%} |
|-----------|------------|-------|------------|---|
| Exogenous | Endogenous | | | |
| IL | IPD | 36.86 | 0.36 | 0.19, 0.53 |
| IL | IPA | 29.58 | 0.29 | 0.17, 0.42 |
| IPD | PI | 39.69 | 0.37 | 0.25, 0.49 |
| IPD | NSI | 17.67 | 0.26 | 0.18, 0.35 |
| IPD | CPLI | 13.38 | 0.33 | 0.19, 0.50 |
| IPD | SAI | 22.73 | 0.24 | 0.18, 0.33 |
| IPD | DIEI | 9.13 | 0.18 | 0.11, 0.26 |
| IPA | PI | 23.12 | 0.28 | 0.15, 0.41 |
| IPA | NSI | 15.87 | 0.29 | 0.15, 0.43 |
| IPA | CPLI | 17.39 | 0.27 | 0.15, 0.40 |
| IPA | SAI | 8.74 | 0.21 | 0.13, 0.29 |
| IPA | DIEI | 15.09 | 0.31 | 0.16, 0.46 |

Source: Statistical Output

Cook distances were also calculated for each working women participant. From the entire population, only seven working women participants were found with outrageous values where which for 4 women respondents' value was 0.58 and for remaining 3 women respondents' value was 1.29. After removing outrageous values revised model is presented below (Figure 1).

Figure 1: Estimated Parameters Path Diagram



After excluding the outrageous values, the revised model was re-conceptualized by executing the re-sampling of women participants for estimated 1000 times and after concluding the very last cycle, to determine 95% scale of evaluation, for every parameter 2.5th and 97.5th percentiles were established (Table 6). Taking into consideration about the sector with which working women respondents are associated, it was noticed that the insurance purchase decision and insurance purchase attitude is significantly associated with the insurance literacy and that is driven through the sector with which they are associated. It was noticed that the insurance purchase decision and insurance purchase attitude is significantly associated with the insurance literacy and also driven through Psychological Interventions (PI), Need and Self-Explanatory Interventions (NSI), Company Practices for Literacy Interventions (CPLI), Staff and Agent Interventions (SAI), and Document and Information Environment Interventions (DIEI).

From the empirical evaluation performed to determine the relative association among the constructs presented above, it could interpret that working women insurance purchase decision and insurance purchase attitude is driven through the insurance literacy. Hence, first hypothesis H01 "Insurance Product and Organization induced insurance literacy guided insurance purchase decisions can affect working women's insurance purchase decisions and attitude" was acknowledged through the significant relationship observed in between the Psychological Interventions (PI), Need and Self-Explanatory Interventions (NSI), Company Practices for Literacy Interventions (CPLI), Staff and Agent Interventions (SAI), and Document and Information Environment Interventions (DIEI). It was also found that the insurance literacy aspects can straightforwardly affect the insurance purchase decisions and insurance purchase attitude of working women respondents. So, H02: Insurance Literacy

of the working women can decidedly affect every possible aspect of working women's insurance purchase decisions and attitude, is acknowledged. D. Multivariate Logistic Regression Test Result Explanation: The multivariate logistic regression test results presenting the associative relationship in between the Insurance Literacy driven Purchase Decision and Attitude of working women that is guided through individual and insurance company interventions is presented in Table 7 below. Following elucidations were drawn from the relative association observed in between the participated variables with reference to the working sector with which women respondent is associated:

a. Significant relationship was observed in between Insurance Literacy Driven Purchase Decision & Attitude–Individual Interventions (Psychophysical Interventions (PI) and Insurance Purchase Decision and Attitude) of both Public Sector (aOR = 2.31; 95% CI: (1.69–2.92) and Private Sector (aOR = 2.04; 95% CI: (1.42–2.66)) working women.

b. Significant relationship was observed in between Insurance Literacy Driven Purchase Decision & Attitude–Individual Interventions (Need and Self-Explanatory Interventions (NSI) and Insurance Purchase Decision and Attitude) of both Public Sector (aOR = 2.45; 95% CI: (1.53–3.38) and Private Sector (aOR = 1.95; 95% CI: (1.29–2.62)) working women.

c. Significant relationship was observed in between Insurance Literacy Driven Purchase Decision and Attitude – Insurance Company Interventions (Company Practices for Literacy Interventions (CPLI) and Insurance Purchase Decision and Attitude) of both Public Sector (aOR = 2.38; 95% CI: (1.84–2.92) and Private Sector (aOR = 2.16; 95% CI: (1.56–2.76)) working women.

d. Significant relationship was observed in between Insurance Literacy Driven Purchase Decision and Attitude – Insurance Company Interventions (Staff and Agent Interventions (SAI) and Insurance Purchase Decision and Attitude) of both Public Sector (aOR = 2.05; 95% CI: (1.44–2.67) and Private Sector (aOR = 2.56; 95% CI: (1.87–3.26)) working women.

e. Significant relationship was observed in between Insurance Literacy Driven Purchase Decision and Attitude – Insurance Company Interventions (Document and Information Environment Interventions (DIEI) and Insurance Purchase Decision and Attitude) of both Public Sector (aOR = 2.49; 95% CI: (1.73–3.25) and Private Sector (aOR = 2.41; 95% CI: (1.86–2.96)) working women.

However, minimum difference was identified for the relative association extent in the working women respondents' of Public and Private sectors for insurance literacy driven purchase decision and attitude – individual interventions, and insurance company interventions.

Table 7: Multivariate Logistic Regression Test Statistics – Relative Association in between Insurance Literacy Driven Insurance Purchase Decision and Attitude in Context to Sector

| Variable | Public Sector aOR (95%CI) | Private Sector aOR (95%CI) |
|--|------------------------------|-------------------------------|
| Insurance Literacy Driven Purchase Decision & Attitude–Individual Interventions (ref) | | |
| Psychological Interventions (PI) | 2.31 (1.69-2.92)*** | 2.04 (1.42-2.66)*** |
| Need and Self-Explanatory Interventions (NSI) | 2.45 (1.53-3.38)*** | 1.95 (1.29-2.62)*** |
| Insurance Literacy Driven Purchase Decision and Attitude – Insurance Company Interventions (ref) | | |
| Company Practices for Literacy Interventions (CPLI) | 2.38 (1.84-2.92)*** | 2.16 (1.56-2.76)*** |
| Staff and Agent Interventions (SAI) | 2.05 (1.44-2.67)*** | 2.56 (1.87-3.26)*** |
| Document and Information Environment Interventions (DIEI) | 2.49 (1.73-3.25)*** | 2.41 (1.86-2.96)*** |

Source: Multivariate Test Result Output (Sig. level: ***p < 0.001, aOR- Adjusted odds ratio)

Consequently, it was concluded that the extent of variability in the strength of the relative association in working women participants of public and private sector for insurance literacy driven (for both individual and insurance company interventions) insurance purchase decision and attitude of both the sector is found small which leads to illustrate the conclusion that insurance literacy driven insurance purchase decisions and attitude of working women at individual and insurance company level is found approximately and equally effective for both the public and private sector women participants.

DISCUSSION AND CONCLUSIVE REMARK

The principle objective of the present research work was to explore the effect of insurance literacy on the insurance purchase behavioral intention followed with the attitude to purchase the insurance in the context of middle-class women of four different states (Delhi, Rajasthan, Uttarpradesh and Gujarat) of India. The study model was based on the planned behavior model (Kim et al. (2009)) and extended valance model (Ajzen & Fishbein (1980)). First and foremost the study model depicted the effect of customers' insurance literacy particularly the knowledge and the skills on their insurance purchase behavior and attitude for selecting the insurance products. Furthermore, the relative association between the insurance literacy effect on insurance purchase decision and insurance purchase attitude was evaluated. From the empirical evidences it was noticed that working women's insurance literacy is directly associated with their insurance purchase decision and attitude which is driven through individual and insurance company interventions. Both the hypothesis was empirically supported and accepted stating "Insurance Product and Organization induced insurance literacy guided insurance purchase decision can affect working women's insurance purchase decisions and attitude" and "Insurance Literacy of the working women can decidedly affect every possible aspect of working women's insurance purchase decisions and attitude", and also found steady with the results of previous studies which were also based on the planned behavior model and extended valance model (Kim et al. (2009); Omar & Owusu (2007); Memarista et al. (2018); Weedige et al. (2019)).

Statistical results derived from SEM analysis meant that working women's insurance literacy related to insurance services and products is a deterministic factor that significantly affects their behavior outlook towards the purchase of insurance for them or any other family member. While indirectly the behavior may influence through Psychological Interventions (PI), Need and Self-Explanatory Interventions (NSI), Company Practices for Literacy Interventions (CPLI), Staff and Agent Interventions (SAI), and Document and Information Environment Interventions (DIEI). The study hypothesized that Insurance Product and Organization induced insurance literacy drive insurance purchase decision and attitude and insurance literacy of working women can decidedly affect every possible aspect of insurance purchase decisions and attitude and found sector independent with which customer is working.

In context to the role of insurance literacy for the customer perspective either male or female, this study documented that psychological interventions and need and self-explanatory interventions favorably mediate the relationship between insurance literacy and behavioral intent to purchase the insurance. Study also confirmed the significant role of Company Practices for Literacy Interventions, Staff and Agent Interventions, and Document and Information Environment Interventions for insurance literacy and behavioral intent to purchase the insurance (Adholiya & Adholiya, 2018). Finally, it could imply that higher insurance literacy is subject to making insurance purchases decision with favorable attitude. The study confirmed the significant relation between the insurance literacy and insurance purchase decision and attitude of the working women customers, the same can be generalized for the male customers also.

Further, it is also confirmed by the study that customers' own Psychological Interventions (PI) and Need and Self-Explanatory Interventions (NSI) drive them for insurance significantly and on other side insurance sectors' specific interventions namely Company Practices for Literacy Interventions, Staff and Agent Interventions, and Document and Information Environment Interventions also plays very significant role in driving the customer behavior and attitude for the insurance products and services positively. It is predictable that researchers, academicians and insurance practitioners can draw the benefits from the empirical results of the study.

The research work contributed to the theoretical and practical aspects of customer behavior understanding for insurance, in context to the insurance literacy. Theoretically, research described the working women's purchasing behavior of insurance products followed with the role of individual interventions and insurance company interventions to make the customer literate and to drive their behavior and attitude for the insurance positively. Additionally, research also contributed that working sector does not result into any difference in the behavior of the customers' for insurance purchase decision and attitude. This study has developed new relative associations (i.e., Insurance Product and Organization induced insurance literacy guided insurance purchase decision can affect working women's insurance purchase decisions and attitude and Insurance Literacy of the working women can decidedly affect every possible aspect of working women's insurance purchase decisions and attitude). Most outstandingly, study contributes to theory of consumer behavior through presenting the role of Psychological Interventions (PI), Need and Self-Explanatory Interventions (NSI), Company Practices for Literacy Interventions (CPLI), Staff and Agent Interventions (SAI), and Document and Information Environment Interventions (DIEI) determinants in driving the behavior and attitude.

REFERENCES

- Adholiya, Ashish & Adholiya, Shilpa. (2018). Customer's Perception towards promotional strategies of Insurance Companies. 2, 9-18.
- Ajzen, I. & Fishbein, M. (1983). Understanding Attitudes and Predicting Social Behavior; Prentice-Hall: Englewood Cliffs, NJ, USA.
- Ajzen, I.B. (2002). Constructing a TPB Questionnaire: Conceptual and Methodological Considerations.
- Bristow, B.J. & Tennyson, S. (2001). Insurance Choices: Knowledge, Confidence and Competence of New York Consumers. In Final Report; Cornell University: Ithaca, NY, USA.
- Churchill, G.A.D.I. (2005). Marketing Research: Methodological Foundations, 9th ed.; Thomson/South-Western: Mason, OH, USA.
- CoreData (2014). The Life Insurance Literacy Gap (Zurich Financial Services Australia and Financial Planning Association of Australia; Zurich: Sydney, Australia, 1-48.
- Driver, T., Brimble, M., Freudenberg, B., & Hunt, K.H.M. (2018). Insurance Literacy in Australia: Not Knowing the Value of Personal Insurance. *Financ. Plan. Res. J.* 4, 53-75.
- Fornell, C. & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.*, 18, 39-50.
- Hair, J.F., Jr., Sarstedt, M., Hopkins, L. & Kuppelwieser, V.G. (2014). Partial least squares structural equation modeling (PLS-SEM). *Eur. Bus. Rev.*, 2, 106-121. [CrossRef]
- Hair, J.F., Ringle, C.M. & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *J. Mark. Theory Pract.*, 19, 139-152.
- Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. & Hair, J.F. (2019). When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.*, 31, 2-24.
- Henseler, J. & Chin, W.W. (2010). A Comparison of Approaches for the Analysis of Interaction Effects Between Latent Variables Using Partial Least Squares Path Modeling. *Struct. Equ. Model. A Multidiscip. J.* 17, 82-109.
- <https://knowindia.india.gov.in/profile/literacy.php#:~:text=The%20literacy%20rate%20in%20the,males%20and%2065.46%20for%20females.>
- Kahneman, D. & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 1979, 47, 263-292.
- Kharas, H. (2010). The Emerging Middle Class in Developing Countries; Working Paper No. 285; OECD, Development Centre: Paris, France.
- Kim, D.J., Ferrin, D.L. & Rao, H.R. (2009). Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration. *Inf. Syst. Res.*, 20, 237-257.
- Kunreuther, H. (1979). Why aren't they insured? *J. Insur.*, 5, XL.
- Kusev, P., Purser, H., Heilman, R.M., Cooke, A.J., Van Schaik, P., Baranova, V., Martin, R. & Ayton, P. (2017). Understanding Risky Behavior: The Influence of Cognitive, Emotional and Hormonal Factors on Decision-Making under Risk. *Front. Psychol.* 2017, 8, 469.
- Lin, X., Bruhn, A., & William, J. (2019). Extending financial literacy to insurance literacy: A survey approach. *Account. Financ.*, 59, 685-713.
- Lusardi, A. & Mitchell, O.S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *J. Econ. Lit.*, 52, 5-44.
- McCormack, L., Bann, C., Uhrig, J., Berkman, N., & Rudd, R. (2009). Health insurance literacy of older adults. *J. Consum. A.*, 43, 223-248.
- Memarista, G., Brahmanna, R. & Brahmanna, R.K. (2018). Planned Behaviour in Purchasing Health Insurance. *South East Asian J. Manag.*, 12, 43-64.
- Omar, O.E. & Owusu-Frimpong, N. (2007). Life Insurance in Nigeria: An Application of the Theory of Reasoned Action to Consumers' Attitudes and Purchase Intention. *Serv. Ind. J.*, 27, 963-976.
- Peterlechner, L. (2017). Insurance Literacy Efforts of the German Development Cooperation, in Voices from the field; Peterlechner, L., Ed.; Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH: Bonn, Germany.
- Quoquab, F., Pahlevan, S., Mohammad, J. & Thurasamy, R. (2017). Factors affecting consumers' intention to purchase counterfeit product. *Asia Pac. J. Mark. Logist.* 29, 837-853.
- Reinartz, W., Haenlein, M. & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *Int. J. Res. Mark.*, 26, 332-344.
- Rezaei, S. (2015). Segmenting consumer decision-making styles (CDMS) toward marketing practice: A partial least squares (PLS) path modeling approach. *J. Retail. Consum. Serv.*, 22, 1-15.
- Rizomyliotis, I., Konstantoulaki, K., Kaminakis, K., Giovanis, A. & Papastathopoulos, A. (2018). Antecedents of customer loyalty in the mobile telecommunication market a cross-cultural investigation. *Acad. Marketing Stud. J.*, 22.
- Sarstedt, M. (2008). A review of recent approaches for capturing heterogeneity in partial least squares path modelling. *J. Model. Manag.*, 3, 140-161.
- Shanteau, J. (1992). Decision Making Under Risk: Applications to Insurance Purchasing. *Adv. Consum. Res.*, 19, 177-181.
- Sum, R.M., & Nordin, N. (2018). Decision Making Biases in Insurance Purchasing. *J. Adv. Res. Soc. Behav. Sci.*, 10, 165-179.
- Tennyson, S. (2011). Consumers' insurance literacy: Evidence from survey data. *Financ. Serv. Rev.*, 20, 165-179.

33. Uddin, M.A. (2017). Microinsurance in India: Insurance literacy and demand. *Bus. Econ. Horiz.* 13, 182–191.
34. Wanczeck, S., McCord, M., Wiedmaier-Pfister, M., & Biese, K. (2017). *Inclusive Insurance and the Sustainable Development Goals—How Insurance Contributes to the 2030 Agenda for Sustainable Development*; GIZ; Bonn, Germany.
35. Weedige, S.S., Ouyang, H., Gao, Y. & Liu, Y. (2019). Decision Making in Personal Insurance: Impact of Insurance Literacy. *Sustainability*, 11, 6795.
36. Wells, B., Epermanis, K. & Gibson, J.P. (2015). The Effect of Insurance Education on Consumer Attitudes: A Study of the Property and Casualty Industry. *J. Finance. Educ.*, 41, 47–65.
37. Wickramasinghe, S.M. & Pranava, M.D. (2013). Profiling the Traditional Sri Lankan Middle-class Consumer. In *Postgraduate Institute of Management (PIM)*; University of Sri Jayewardenepura Colombo: Nugegoda, Sri Lanka.