What Influence Customer Patronage of Insurance Policies: An Empirical Assessment of Socio-Economic and Demographic Determinants of Insurance Patronage in Ghana

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ABSTRACT

The study attempts to explore and assess the social economic and demographic (SED) factors that are likely to influence the patronage of insurance in Ghana. Employing a cross-sectional and convenient sampling method, 200 respondents were selected to answer semi-structured questionnaires. Using a Probit econometric regression model for analysis, the results indicate these SED determinants are positively and significantly related to insurance demand, except that of religion. This implies that SED determinants with the exception of religion play major roles in influencing people’s decision to subscribe to insurance policies. Again, it was observed that with the exception of religion, all the SED variables have strong positive relationship with insurance patronage in Ghana. Apart from income which was identified as the major challenge to subscribing to insurance policies, other challenges such as lack of knowledge on insurance policies, inadequate transparency of insurance policies, and difficulty in obtaining insurance claims, do deter people from taking up insurance policies. Based on these outcomes and challenges, the study recommends that insurance companies develop marketing strategies that are customer centered, by taking into consideration the SED characteristics of consumers.

Keywords: Customer Patronage, Perceived Enjoyment, Customer Satisfaction, Insurance Policies, Insurance Subscriber

JEL Classification: N3

1. INTRODUCTION

Many studies have shown that patronage of insurance policies is largely influence by customer’s social economic and demographic (SED) characteristics. Socioeconomic/demographic characteristics which include education, income, age, religion, sex, marital status, occupation and family size among others have been found to have a close association with insurance patronage. This has been established by various authors and scholars (Backnigham, 2007; Pauly and Herring, 2001; Propper, 2000; Temple, 2002; Trujillo, 2003). Kirigia et al. (2005) observed that there exist significant positive relations between socio-demographic characteristic of customers and marketing of insurance products. Bloom (2004) also stressed that a close relationship exists between marketing and socio-demographic variables of customers. Among all these SED variables; access to health care information, education, age, marital status, sex, family size, occupation and income were seen as having direct and significant positive influence on health insurance.

This underscores the fact that socio-economic/demographic characteristics play an important role in the marketing of insurance products. Therefore Ibok (2012) emphasized that investigating the consumer characteristics affecting the programme being marketed is imperative. In effect, for any programme in marketing to be successful it must take its orientation from the consumer. According to Rai and Medha (2013) Marketing and health insurance appear to reflect closely related processes, which are influenced by the same variables including education, income, sex, marital status, religion, access to health care information, employment, family size, among others. This implies that SED characteristics play an important role in determining customer patronage of insurance products.

Ackah and Owusu (2012) observed in 2010 that access to insurance in Ghana is low (4.1%) and this figure excludes public health insurance. They attributed this low patronage, especially among the low-income population in Ghana to lack of knowledge.
about insurance products, and to an extent misunderstanding of the concept of insurance accounts. This means that adequate knowledge about customer educational level helps in adopting effective marketing strategies for insurance products. According to an industry report by the National Insurance Commission (NIC) (2010), most Ghanaians especially those in the informal sector, do not take-up insurance as a way of preparing towards future unforeseen misfortunes. This unfortunate development is attributed to the high illiteracy rate and the general lack of insurance knowledge amongst the populace. Other significant socioeconomic/demographic factors that influence low patronage of insurance in Ghana are low income levels and cultural and religious beliefs (Saeed et al., 2012). Majority of Ghanaians have the belief of relying on God’s protection to prevent calamities and that to have a mindset of preparing for future unforeseen eventualities by subscribing to insurance products means that one is faithless.

After its structure and establishment in 1990, the NIC has seen massive development as result of vast proliferation of insurance companies both foreign and local. Recent Statistics from the NIC attests to this fact that the industry has been growing very fast with total gross premium of GH¢ 458.6 million in the year 2010 representing a growth rate of 33% from the previous year. The significant growth in the industry is as a result of the strength and capacity of the NIC in encouraging the patronage of life insurance policies. It was realized that the life insurance business contributed more to the industry's total premium income than the motor business and general insurance businesses. For instance, while non-life premium income grew by 23% from GH¢221 million in 2009 to GH¢ 272 million in 2010, the life sector premium income grew by 52% from GH¢122 million in 2009 to GH¢187 million in 2010 resulting in a 33% growth in total premiums from GH¢343 million in 2009 to GH¢459 million in 2010. Generally, by all indicators, the life sector appears to be growing much faster than the non-life sector. It has also been observed that between the years 2009 and 2012, the NIC have had an average of more than 20 new insurance companies coming into the insurance industry every year. Like other countries, one vital contribution of insurance to socio-economic development of Ghana is savings and consumption (Steiner and Mirko, 2011). The recent insurgence of micro insurance on the Ghanaian insurance market is a strong evidence of this fact. This implies that the Ghanaian insurance industry is a lucrative sector of the economy as by its activities offer remarkable opportunities to the socio-economic developments of Ghana. Nonetheless, these significant achievements in the Ghanaian insurance industry, the sector is still bedeviled with challenges of wrong perceptions and other crises that continue to hamper the fulfillment of its huge potentials. Industry experts have indentified many of the challenges in the form of undercutting, unethical underwriting and marketing practices and over reliance on credit to manage the competition. These harmful effects are currently posing major challenges to the growth and efficiency of the industry.

However after 23 years of the establishment of NIC with its remarkable contribution to the socio-economic development of Ghana, it is considered appropriate to assess the SED characteristics that influence customer patronage of insurance policies or products and also influence their decision to patronized insurance policies. Moreover, Ibok (2012) like several other researchers noted that previous research on insurance marketing especially health insurance have not taken into explicit consideration the issue of SED variables as a major thrust in the formation of strategic health insurance marketing policy. He lamented that no major empirical work has been carried out to specifically see how these SED variables could be integrated in the marketing of health insurance. This study therefore seeks to examine how these SED variables influence customer patronage of insurance policies vis-a-vis the marketing of insurance policies in the Ghanaian insurance industry. Against this background the paper will find answers to the following questions:

- What are the SED characteristics of insurance subscribers in Ghana?
- What are the challenges that deter people form subscribing to insurance policies in Ghana?
- What is the relationship between customer’s SED characteristics and their patronage of insurance policies in Ghana?

Objectives:

- To identify the SED characteristics of insurance subscribers in Ghana.
- To determine the challenges that deter people form subscribing to insurance policies in Ghana.

To assess the relationship between customer’s SED determinants and their patronage of insurance policies in Ghana.

1.1. Hypothesis

In order to determine the scientific reliability of the results obtained, the study will set a hypothesis help test if there is any significant relationship between SED and patronage of insurance policies. According to Aduloju et al. (2009), hypothesis is the statistical procedure used to state the null hypothesis (H₀), which is to be followed by the alternative hypothesis (H₁). While a H₁ is a statement that no change has occurred from the condition stated, the H₀ is a reversal of the H₁. Thus, if in hypothesis testing, a H₀ is rejected, then, the H₁ will be accepted. Hence the hypothesis is stated below:

H₀: SED characteristics is not a major determinant of insurance patronage.
H₁: SED characteristics is a major determinant of insurance patronage.

1.2. Significance of the Study

The Ghanaian insurance industry is becoming very robust with many unscrupulous companies who offer no value to the industry but only tarnish its hard earned image. Therefore this is appropriate to conduct research to know peoples perception of insurance policies and products in Ghana in order to find appropriate solutions to lapses and challenges bedeviling the industry. It is deemed that the outcome of the study will furnish the NIC with relevant information for making dynamic reforms, policies and institutional and legal frameworks which are useful and timely and expected to have positive impact on insurance patronage in Ghana.
Secondly, the outcome of this study is expected to provide relevant information to insurance companies on customer’s insurance preferences. This information can be useful in segmenting the market and designing appropriate marketing strategies to gaining competitive advantage. This is important because the Ghanaian insurance industry is becoming more competitive as result of the massive inflow of private insurance companies and most market potentials will soon be saturated with the coverage of compulsory lines of business especially Motor and Health Insurance. Therefore to gain more competitive advantage it is important to know the mind set of people about insurance and what influences their decisions for insurance products, and satisfaction level of existing customers.

2. REVIEW OF LITERATURE

According to Nwankwo (2011), the need for insurance and protection from risk arose from the need to provide for security needs both from natural and manmade disasters, trading uncertainty for some level of reasonable certainty has been a basic human drive. After the boom of the insurance industry in the late 1990’s more studies have been done on the influence and effects of SED characteristics on insurance patronage. Many contemporary scholars seem interested in SED variables in order to rule out the long established effects of SED on various measures of well-being and lifestyle outcomes. Generally, socioeconomic status is unobserved and hence proxy measures are required. Common concepts considered in searching for proxy measures include income, consumption, wealth, education and employment. However, the relative importance of these and other concepts in terms of capturing socio-economic status can change substantially through time and across populations of societies. Demographic variables are the quantifiable statistics of a given population which include biological data of people such as age, income, gender/ sex, marital status, employment, religion among others. Many scholars such as Grossman, 1972; Kroniek and Gilman, 1999; Long and Marquis; 2002; and Pauly and Herring (2001) have well explored and documented the evidence of the influence of SED characteristics on insurance patronage. For instance Propper, 2000; Temple, 2002 have found occupation, sex, and family size to be robust predictors of health insurance consumption. Again, Browne and Kim (1993) found a positive relationship between life insurance consumption and the level of income.

In Africa, many people are burdened with financial challenges and have no or limited access to insurance or government assistance. According to a study conducted in 2010 by Ackah and Owusu (2012) in Ghana, access to insurance is low: 4.1% which excludes public health insurance. They further stressed that low patronage of insurance in Ghana is attributed to several SED factors which usually pose challenges to insurance system, the most obvious being that a majority of economically active people work in the informal sector. Ibok (2012), explored the relationship between SED variables and the joint contribution of these variables in determining health care insurance consumption in a developing economy like Nigeria and found that socioeconomic factors such as age, sex, income, access to health insurance information, education, age, marital status, sex, family size, occupation, except religion had positive coefficients suggesting that health insurance patronage is a function of consumer’s SED characteristics. For this study, SED characteristics will serve as the independent variables to be tested in determining their influences on the dependent variable which is insurance patronage. These variables have been elaborated below.

2.1. Income Status

According to Guha-Khasnobis and Ahuja (2004), the harsh economic conditions of poor people and households causes enormous risks and impede their efforts from breaking the vicious cycle of poverty and therefore, there must be measures to empower the poor to deal with risk effectively (Holzmann and Jorgensen, 2000; Siegel et al., 2001). Indeed, risks have significant influence in the lives of poor persons, Akotey et al. (2011). Insurance is considered as one of the financial risk management strategies that can help the poor to deal with risk effectively. Poor people are more risk-averse and consider themselves more exposed to risk than others and are found to be less likely to participate in insurance. This is because a person’s consumption and human capital typically increase along with income, creating a demand for insurance in order to safeguard the income potential of the insured. Low-income households are regarded as persons who are unable to afford regular insurance premiums. For others, the poor is uninsurable because of the various risks they face, some of which are mass covariant risks (Guha-Khasnobis and Ahuja, 2004). More recently, Giesbert, et al. (2011) noted that household savings often serve an insurance purpose and it is plausible that savings and loans are particularly strongly used as substitutes for insurance when no insurance market exists. However, the examples of India have shown that the poor have the capacity to make small periodic contributions as premiums to insure them against risks. In addition, they are insurable because the risks they face are idiosyncratic and predictable and that there are cost-effective methods of providing insurance to those people with little income.

2.2. Gender/ Sex

Kirigia et al. (2005) found out through a research on insurance ownership among women in South Africa that there exist a positive direct relationship between health insurance consumption and the various SED characteristics of South African women. Again, in Ghana, majority of women unlike their men is more risk averse because of their homely and motherly duties; they therefore have high tendency of subscribing to insurance packages (Giesbert et al., 2011).

2.3. Education

With regard to this variable, Ibok (2012) observed that education increase people’s ability to understand the benefits of risk management and even long term savings as a pre-cautionary measure and therefore increases their risk aversion. Thus, education is undoubtedly, an important determinant of the consumption of health insurance (Bloom, 2004; Blumberg and Nichols, 2002; Juetting, 2003; Trujillo, 2003). A higher level of education in a population is positively correlated with the demand for any type of insurance product. This is because education may increase people’s ability to understand the benefits of risk management and the propensity to patronize insurance policies. Akotey et al.
(2011) lamented that the lack of knowledge on insurance policies and products, and to an extent misunderstanding of the concept of insurance accounts for the low uptake of insurance among the low-income population in Ghana. However, they argued that formal education is not a significant determinant; rather one’s level of insurance knowledge has a positive and significant impact on micro-insurance demand.

2.4. Religious Status
Previous studies have found that religious factors affect the demand for insurance. Religious faith of the people have been investigated and found with empirical evidence to affect health insurance consumption (Ibok, 2006; Juetting, 2003). For instance Juetting (2003), found a significant relationship between Catholicism and health insurance consumption. Again, Saaty (2011) also analyzed the effect of Islamic principle on insurance customer’s future plan to purchase insurance and found that people in Saudi Arabia consider insurance to be against Sharia’h and that it is partially true and affects the purchasing decision of the people. More recently, Ibok (2012) through a research in Nigeria observed that religion as a SED variable had no effect on insurance consumption.

2.5. Age
According to Ibok (2006) age has been identified as a statistically significant variable and has positive predictions on insurance patronage. Although it has been established that insurance consumption cuts across every age, older individuals are generally more knowledgeable in insurance and their literacy and attitude towards insurance is much higher than younger individuals.

2.6. Marital Status
Scholars like Trujillo (2003), Liu and Chen (2002); Cameron and McCollum (1995) are of the opinion that married couples are more likely to buy insurance coverage of any kind, and those gainfully employed also take insurance coverage more than the unemployed (Butler, 1999; Sawage and Wright, 1999).

Akotey et al. (2011) also found marital status to have positive and significant impact on the demand for micro insurance. They noted that married couple will demand various micro-insurance services such as life insurance, to secure their family’s future so that in the event of death, the family can have some financial assistance in the form of the insurance claims to depend upon.

2.7. Employment Status
Some studies have shown that SED factors most especially education affect people’s employment status. According to Yuzbasioglu (2010), informal employment is seen more frequently in places where the level of education is low. Sisman (1999) observed that in developing countries undereducated and unskilled people are obliged to work in informal sector. Years later Akturk (2005) also found out those in developing countries, mostly undereducated labor work in unskilled jobs due to the fact that there is not sufficient potentiality of creating employment.

Over the past two decades, the Ghanaian insurance industry has witnessed massive influx of private insurance companies whose activities have had a healthy knock-on-effect on socio-economic developments. Conversely, the industry is bedeviled with many challenges popular among them are; low customer patronage, limited industry information, and lack of public confidence in the industry. Until recently and even now, the industry’s weak regulatory systems with regards to insurance management has led to price undercutting, fraudulent claims and delays in claim payments. These and many other intrinsic factors have led to low customer patronage of insurance policies and products in the Ghanaian Insurance Industry.

3. MATERIALS AND METHODS
This study is purely quantitative in nature and was carried out using a survey design method that utilizes questionnaires, interviews, field observation and in some instance focus group discussions with opinion leaders as key research instruments. With the help of a survey company, a cross-sectional approach was adopted in collecting primary data from a population of both public and private sector employees within the Sunyani Municipality. The questionnaire which consisted of 20 semi-structured and open ended items was pretested by administering it to 20 purposively selected employees in the public and private sector of the economy. The essence of pre-testing the research instrument is to ensure reliability and high degree of accuracy of the questionnaire which was found to be 73% reliable and accurate. The questionnaires were subsequently administered to 200 respondents (100 each) from the population of public and private sector employees. Originally, the intention was to administer more, but owing to limitations such as financial and time constraints, a convenient sampling method was adopted to sample just 200 respondents. Out of a total of 200 questionnaires administered, 146 were retuned backed. The primary data which are mainly quantitative forms respondent’s SED characteristics and includes gender, age, education, marital status, employment status, income among others. These primary data were analyzed with the help of the computer software Statistical Package for the Social Sciences into descriptive statistics such as mean, mode, percentages, variance, standard deviations, and presented in various graphs and tables. In testing the hypothesis, a Chi-square statistical method was adopted in testing at 5% level of significance. Again, in determining the relationship and effect of SED variables on the decision of respondents to insurance patronage, a multiple regressions analysis was used. The study therefore adopted an econometric model called the Probit model which has a framework that has dummy variables as dependent variables. Akotey et al. (2011) used this model in a similar research and the results proved highly accurate. The Probit Model assumes that unobserved variable like desire for a thing is called latent variables and therefore assumes the existences of an underlying latent dichotomous realization. In this model, the observed dummy variable, Y, is whether or not the person will patronize any insurance policy apart from the National Health Insurance Scheme. While Y* is the propensity for a person to patronize insurance policies. Thus when a person’s desire is >0 (Y*>0) the person demands insurance policies. Maddala (2005) thus emphasized that there is a desire and ability involved in the model which is usually determined by the dependent variable. However, since desire is intrinsic and cannot be seen, we define Y the dummy variable as;
Y=1 (if a person demands insurance)
Y=0 (if a person does not demands insurance)

We therefore defined the latent variable, Y* as Y* =Xβ + e

Therefore the equation is Y* =β₀ + β₁X₁ + β₂X₂ + β₃X₃ + β₄X₄ + β₅X₅ + β₆X₆ + β₇X₇ + β₈X₈ + e

Where Y* = Desire which is unobserved
X = The independent variables
β = Coefficient of the explanatory variables
e = The error term which is distributed as normal variables (standard normal distribution)

Thus the model equation is; Insurance patronage = β₀ + β₁sex + β₂education + β₃age + β₄marital status + β₅income status + β₆employment status + β₇number of dependents + β₈religion + e

Therefore, insurance patronage (Y*) is estimated to be a function of several SED characteristics of the consumer expressed in the equation above.

Where Y* = Insurance patronage, X₁ = sex, X₂ = education, X₃ = age, X₄ = marital status, X₅ = income status, X₆ = employment status, X₇ = number of dependents, X₈ = religion, and e = error term.

### 4. PRESENTATION OF RESULTS AND DISCUSSION

#### 4.1. SED Characteristics of Respondents

The results as depicted in Table 1 below shows that 59.6% of the respondents are females as compared to 40.4% of males. This confirms an earlier research by Giesbert et al. (2011) who observed that majority of Ghanaian women unlike their men are more risk averse because of their homely and motherly duties; they therefore have high tendency of subscribing to insurance packages. This therefore implies that SED variable of gender/sex is a major determinant of insurance patronage in Ghana.

In terms of age, 1.4% of the respondents fall below the years of age of 30 while 30.8% of them are between the ages of 31-40. The rest 36.3%, 24.0% and 7.5% fall within the age brackets of 41-50, 51-60 and above 60 respectively. It can be deduced from this results that insurance subscription increases with age increase because majority of the respondents fall within the age bracket of 31-50. The results imply that age as a SED variable is a key determinant of insurance patronage.

With regards to marital status, it was realized that 73.3% of the respondents are married while the remaining 26.7% are single. This result confirms previous studies by scholars like Trujillo (2003), Liu and Chen (2002), Cameron and McCollum (1995) that married couples are more likely to subscribe to insurance policies of any kind. Therefore marriage is a strong SED variable determinant of insurance patronage.

Again, majority (45.9%) of the respondents who are employed work in the public sector while 42.5% and 11.6% work in the private sector and as self employed respectively. This shows that majority of the respondents are public sector workers whose jobs are secured assuring them fix income which they can plan well with, hence there is a high probability to subscribe to insurance packages. Butler (1999), Sawage and Wright (1999) all supported that people who are gainfully employed take insurance coverage more than the unemployed and people with unstable incomes.

Furthermore, majority (53.4%) of the respondents confessed Christianity as their religious belief while the 39.0% confessed Islamic religion, the remaining 7.5% answered “other” for this kind.

### Table 1: SED characteristics of respondents (n=146)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>59 (40.4)</td>
</tr>
<tr>
<td>Female</td>
<td>87 (59.6)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
<tr>
<td><strong>Age (year)</strong></td>
<td></td>
</tr>
<tr>
<td>Below 30</td>
<td>2 (1.4)</td>
</tr>
<tr>
<td>31-40</td>
<td>45 (30.8)</td>
</tr>
<tr>
<td>41-50</td>
<td>53 (36.3)</td>
</tr>
<tr>
<td>51-60</td>
<td>35 (24.0)</td>
</tr>
<tr>
<td>Above 60</td>
<td>11 (7.5)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
</tr>
<tr>
<td>Christianity</td>
<td>78 (53.4)</td>
</tr>
<tr>
<td>Islamic</td>
<td>57 (39.0)</td>
</tr>
<tr>
<td>Other</td>
<td>11 (7.5)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>67 (45.9)</td>
</tr>
<tr>
<td>Private sector</td>
<td>62 (42.5)</td>
</tr>
<tr>
<td>Self employed</td>
<td>17 (11.6)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
<tr>
<td>Income status</td>
<td></td>
</tr>
<tr>
<td>Below GHS500.00</td>
<td>11 (7.5)</td>
</tr>
<tr>
<td>GHS 600.00-GHS 1000.00</td>
<td>48 (32.9)</td>
</tr>
<tr>
<td>GHS 1100.00-GHS 1500.00</td>
<td>34 (23.3)</td>
</tr>
<tr>
<td>GHS 1600.00-GHS 2000.00</td>
<td>31 (21.2)</td>
</tr>
<tr>
<td>Above GHS2000.00</td>
<td>22 (15.1)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
<tr>
<td><strong>Number of dependent</strong></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>109 (74.7)</td>
</tr>
<tr>
<td>6-10</td>
<td>23 (15.8)</td>
</tr>
<tr>
<td>Above 10</td>
<td>14 (9.6)</td>
</tr>
<tr>
<td>Total</td>
<td>146 (100.0)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2013. SED: Social economic and demographic
question. This implies that in Ghana, religious and cultural beliefs have great influence on people’s decision to subscribing to insurance packages. This is supported by the finding of Juettting (2003) that shows a significant relationship between Catholicism and health insurance consumption.

On educational status, majority (40.4%) of the respondents have attained bachelor’s degree, 16.4% have obtained their masters degrees, and 30.1% have diploma qualifications while the remaining 5.5% and 7.5% have Phd. and other academic qualifications respectively. With this high level of educational qualifications, it is expected that respondents know more about the insurance industry in Ghana. This is because education may increase people’s ability to understand the benefits of risk management and even long term savings as a pre-cautionary measure and therefore increase their risk aversion, Ibok (2006). It is expected that such level of education may have a positive impact on their understanding of the concepts of insurance, and insurers will have to make a positive use of this in their product design, Akotey et al. (2011).

It was further envisaged that majority (32.9%) of the respondents have income levels within the range of GHS600-GHS100 while 23.3% have income range of GHS1100-GHS1500, 21.2% have income range of GHS1600-GHS2000 and 15.1% have income range above GHS2000. Only 7.5% have income below GHS500. This implies that majority of the respondents have low incomes and thereby can not save much to subscribe to insurance policies. Giesbert et al. (2011) observed that insurance consumption rises with income and that people and households with low income usually save often to serve an insurance purpose. More so, it can be noted in Table 1 that more (74.7%) of the respondents have between 1-5 people depending on them, while 15.8% and 9.6% have 6-10 and more than 10 people respectively depending on them for economic and other financial support. This situation implies that with less income and high dependency ratio, people can hardly have sufficient for themselves and their dependents lest to subscribe to insurance policies.

\[ H_0: \chi^2 \text{calculated=}15.75, \text{while } \chi^2 \text{tabulated at a level of significance of 0.05 is 5.991. That is } \chi^2 \text{calculated is }>\chi^2 \text{tabulated: } 15.75>5.991. \text{ Since } \chi^2 \text{cal is }>\chi^2 \text{tabulated, } H_0 \text{ is rejected and } H_a \text{ is accepted, thus concluding that SED characteristics is a major determinant of insurance patronage in Ghana.} \]

4.2. Subscription to Insurance Policy
62% of the respondents, which forms the majority answered that they do not subscribe to insurance policies, only 38% answered that they have subscribed to various insurance polices. This is shown in Figure 1 below. This implies that majority of Ghanaians do not subscribe to insurance policies to cushion them in times of difficulties. Many of these respondents indicated inadequate income and lack of knowledge on insurance policies among others as reasons for not subscribing to insurance policies.

4.3. Challenges Deterring People from Subscribing to Insurance Policies in Ghana
From 2, it can be seen that a chunk of the respondents (49%) indentified lack of knowledge on insurance policies as the major challenge that deter them from subscribing to insurance policies. The next major challenge is low income 22%, whiles lack of transparency in insurance policies and difficulty in obtaining insurance claims had 17% and 12% responds respectively. The implication of the above response rate is that, despite of Ghana’s low per capita income thus making it difficult for majority of the people with low incomes to subscribe to insurance policies, insurance companies have not done enough to market (advertize) their policies and products more to the general populace about the benefits of subscribing to insurance policies (Figure 2).

4.4. Relationship between Customer’s SED Determinants and their Patronage of Insurance Policies in Ghana
A Probit econometric Model which uses a regression analysis was employed to determine the relationship between SED variables and insurance patronage in Ghana. The SPSS was employed to calculate the multiple regressions adopted for measuring the relationship between the independent and independent variables.

The estimated equation is shown in Table 2.

From the results obtained Table 2, it can observed that all the independent variables estimates are positively correlated with the exception of \( X_8 \) (-1.029) which is Religion. This implies that the SED determinants of insurance mainly sex/gender \((X_5)\), education \((X_2)\), age \((X_1)\), marital status \((X_3)\), income status \((X_4)\), employment status \((X_6)\), religion \((X_7)\) and number of dependents \((X_8)\) all have significant positive relationship with insurance patronage. The independent variable which is \( Y^* \) is explained by the independent variables and it was realized that the higher the coefficients of these variables the more insurance policies will be patronized. At a significant level of 5%, \( Y^* = R^2 0.683 \) or 68% which is highly

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**Figure 1:** Subscription to insurance policy

![Subscription to insurance policy](source: Authors' Own (2013))

**Figure 2:** Challenges deterring people from subscribing to insurance policies

![Challenges deterring](source: Authors' Own (2013))
Table 2: Results of probit regression model

<table>
<thead>
<tr>
<th>Patronage (Y)</th>
<th>Coefficient (β₁, Y)</th>
<th>SE (X₁,…,X₈)</th>
<th>Z</th>
<th>P&gt;Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (X₁)</td>
<td>0.4348</td>
<td>0.1579</td>
<td>1.59</td>
<td>0.029**</td>
</tr>
<tr>
<td>Education (X₂)</td>
<td>0.5385</td>
<td>0.1445</td>
<td>2.16</td>
<td>0.035**</td>
</tr>
<tr>
<td>Age (X₃)</td>
<td>0.6468</td>
<td>0.6885</td>
<td>2.51</td>
<td>0.125</td>
</tr>
<tr>
<td>Marital status (X₄)</td>
<td>0.4775</td>
<td>0.1687</td>
<td>1.73</td>
<td>0.327**</td>
</tr>
<tr>
<td>Income status (X₅)</td>
<td>0.2745</td>
<td>0.2256</td>
<td>1.69</td>
<td>0.061**</td>
</tr>
<tr>
<td>Employment status (X₆)</td>
<td>1.3193</td>
<td>0.6087</td>
<td>2.93</td>
<td>0.063**</td>
</tr>
<tr>
<td>Number of dependents (X₇)</td>
<td>0.1753</td>
<td>0.404</td>
<td>1.13</td>
<td>0.042**</td>
</tr>
<tr>
<td>Religion (X₈)</td>
<td>−0.0653</td>
<td>0.1998</td>
<td>−1.029</td>
<td>0.809</td>
</tr>
<tr>
<td>Cons</td>
<td>−3.532</td>
<td>1.7699</td>
<td>−1.76</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Y*~R²=0.683 or 68% at 5% significant level, **indicated significant at 5% level. This means that the alternate hypothesis is true and can be accepted at 95% confidence level.

significant to make a generalization of the influence of independent variables (SED) on the dependent variable (insurance patronage). On a whole it can envisaged that all the independent variables are positively related to the dependent variable which is insurance patronage.

5. CONCLUSION AND RECOMMENDATIONS

Deducing from the results of the research, it can also be concluded that SED characteristics is a major determinant of insurance patronage in Ghana. More so, the outcome of the results from the analysis gives ground to conclude that the independent variables of SED determinants (education, age, marital status, sex, employment status, number of dependents, and income) have direct and significant positive relationship with the dependent variable of insurance patronage. This is confirmed by previous and similar researches on insurance conducted by Ibok (2012), Ibok (2006), Backnigham (2007), Pauly and Herring (2001), Propper (2000), Temple (2002), Trujillo (2003), Akotey et al. (2011), Saaty (2012) among others. Moreover, it can be concluded that these SED variables have an influence on the challenges that deter people from subscribing to insurance policies. Paramount among these challenges is lack of knowledge on insurance which can be closely associated to education.

From the above analysis, results and discussions, it is very expedient to adopt necessary strategies to help improve the patronage of insurance policies in Ghana. The information on people’s SED characteristics would go a long way to help insurance companies to adopt appropriate marketing strategies to solving some of the challenges deterring people from patronizing insurance products in Ghana. Since knowledge on insurance has been found to have a significant influence on insurance demand in Ghana, it is highly recommended that insurance companies should re-align their marketing strategies by focusing on peoples SED characteristics.

Secondly, the government should work in collaboration with the NIC to develop and enforce a comprehensive and workable insurance policy framework to regulate and prevent the entry of unscrupulous players into the industry.

Lastly, policymakers in the insurance industry must embark on national sensitization and education programme to educate the public about the importance of subscribing to insurance policies, legal obligations of the parties involved in the insurance contractual relationship and an explicit explanation of when a policyholder can make a claim and the procedure for making such claims. This will help them to rebrand their image thereby creating a positive public image to change the negative perception people have about them.

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