# Islamic insurance in the European Countries: Insights from French Muslims' perspective

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*Abstract*: -The main purpose of the study is to investigate the willingness of the French Muslims to adopt Islamic insurance (*takaful*), as well as the factors that may influence their decision. Accordingly, 100 questionnaires were distributed to French Muslims in several cities. The data was analysed using Structural Equation Modelling (SEM) as well as one sample t-test. The findings indicate that subjective norm has a positive influence on the attitude towards Islamic insurance services. Furthermore, attitude and perceived behavioural control were found to have a positive influence on the intention to adopt these services. Finally, the French Muslims have shown willingness to adopt *takaful* services as an alternative to the existing conventional insurance services depending on the above dimensions.

*Key-words*: - France, Europe, Islamic insurance, *Takaful*, SEM, TPB.

## 1 Introduction

On March 2012, *La Compagnie française de conseil et d'investissement (CFCI & associés*) announced its decision to launch the first Islamic life insurance contract in the French market[1]. This initiative is expected to provide French Muslims with an alternative insurance service that is compatible with their religious beliefs. Nevertheless, due to the current situation in France, it is questionable whether French Muslims' behavioural decisions would have remained unaffected. Hence the current study attempts to examine the willingness of the French Muslims in adopting Islamic insurance services, as well as the factors that may influence their decisions.

In this regard, several studies have examined the customers' perception and willingness to buy Islamic insurance (*takaful* thereafter) policies in different contexts. For instance, [4] have studied customers' perceptions on *takaful* in Brunei Darussalam. Their results revealed that the most challenging problem facing *takaful* policyholders is the claiming process.

Similarly, [3] examined the perception of the government toward Islamic Motor insurance in Malaysia. Their results showed that the government's servants have a positive perception towards Islamic motor insurance.

Likewise, [13] investigated service quality perception in *takaful* industry in Malaysia using SERVQUAL model. The findings indicated that there is deficiency in service delivery and this is mainly based on the gaps in the five dimensions of the SERVQUAL model.

As it shown above, the studies on *takaful* services perception are still scarce, and also most of them are recent. This indicates that this is a green field that requires further research in order to enrich this area, and to establish a comprehensive framework to be used in various contexts. Accordingly, the current study suggests the Theory of Planned Behaviour (TPB) as a proposed framework that covers all the aspects of the human behaviour i.e. the personal attitude, the social influence, as well as the perceived control over the behaviour.

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[1] http://www.lepoint.fr/economie/apres-la-viande-l-assurance-vie-halal-07-03-2012-1438799_28.php
retrieved on March 15th, 2012.

TPB also called Social Cognition Model (SCM) was introduced in 1985 by Icek Ajzen. It is the extension of TRA with the addition of a third antecedent to behavioural intention i.e. perceived behavioural control [22].

The theory divides the formation of the behaviour into three main sections, namely, external dimensions of the behaviour, internal dimensions of the behaviour, and the final actual part [22]. As shown in Figure 2, volitional human behaviour is immediately predicted by intention to engage in that particular behaviour. Behavioural intention is predicted in turn by three main determinants, namely, attitude towards the behaviour, subjective norm and perceived behavioural control (PBC) [6].

The extent to which individuals have a positive (negative) attitude towards a particular behaviour, perceive that significant others support (do not support) them to engage in that behaviour, and believe that they are able (unable) to perform the behaviour, serve as determinant of their willingness (non-willingness) to perform that behaviour [19].

The attitude towards the behaviour is determined by the sum of accessible behavioural beliefs, which refer to the subjective probability that the behaviour will achieve expected outcomes positively or negatively. Similarly, subjective norm is determined by the sum of normative beliefs which reflect the perceived behavioural expectation or opinions of important referent individuals or groups. On the other hand, perceived behavioural control is determined by the sum of accessible control beliefs which refers to the perceived presence of requisite resources and opportunities to perform a given behaviour [1].

For accurate application of TPB, three main requirements should be met. Firstly, intentions and perceptions of behavioural control should be assessed in relation to the particular behaviour in question, and the specified context must be the same as that in which the behaviour occurs. Secondly, intention and perceived behavioural control must remain stable in the interval their assessment and the observation of the behaviour, this is because intervening events may cause changes in intention or perceived behavioural control with the effect that the original measures of these variables no longer permit accurate prediction of behaviour. Thirdly, is the accuracy of the perceived behavioural control, since the theory suggests that PBC should improve, to the extent that it will reflect actual control [1].
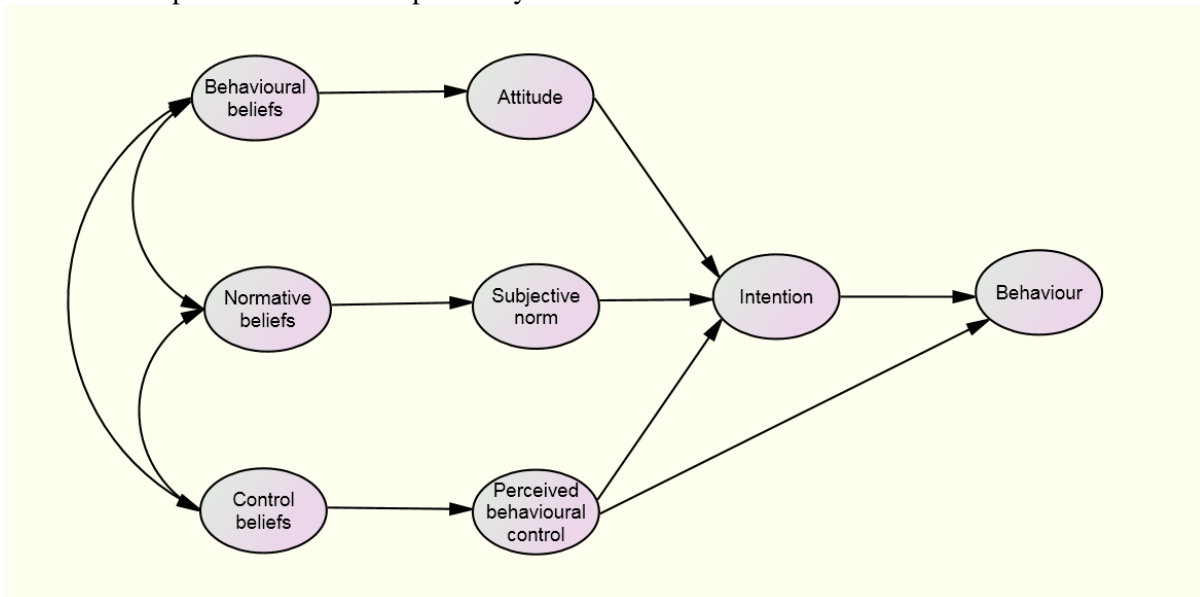


Fig.1: Theory of planned behaviour (TPB)

PBC refers to the perceived ease or difficulty of performing the behaviour, and it is assumed to reflect past experience as well as anticipated impediments and obstacles [1]. According to [1], TPB does not deal directly with the amount of control a person actually has in a given situation; instead, it considers the possible effects of perceived behavioural control on achievement of behavioural goals.

PBC has two main antecedents, namely, the control belief, which is the person's perception of his ability to behave, and perceived degree of facilitation, which includes the resources and opportunities the person possesses to execute a given behaviour. The more the person feels he has the ability to perform a behaviour and the more resources and opportunities the person has to execute the behaviour, the higher will be the

perceived behavioural control for that specific behaviour [22]. Thus, PBC can be written as follows:

$$PBC = \sum cb_{ij} \, pf_{ij}, \qquad (1)$$

where PBC is perceived behavioural control, *cb* is the control belief, and *pf* is the perceived facilitation.

Finally, although there is no perfect relationship between behavioural intention and actual behaviour, intention can be used as a proximal measure of behaviour [1]. This observation was one of the most important contributions of the TPB model in comparison with previous models of the attitude-behaviour relationship, and their role in predicting actual performance has been empirically validated [10]. Intentions capture the motivational factors that drive a person to perform some behaviour. In a sense, intention is a measure of effort an individual is ready to exert to accomplish some behaviour. Intentions can only affect the behaviour to the extent that the person's actual behavioural control allows them to [17].

Behavioural intention is thus influenced by three primary factors, namely, evaluation of the behaviour i.e. attitude toward the behaviour, perceived social pressure to perform or not to perform the behaviour i.e. normative support, and the perceived degree of personal prerogative regarding the behaviour i.e. perceived behavioural control [8]. Thus, behavioural intention under TPB can be expressed as follows:

$$BI = (AB) \, w_1 + (SN) \, w_2 + (PBC) \, w_3, \qquad (2)$$

where *AB* is the attitude towards the behaviour, *SN* is the subjective norm and *PBC* is the perceived behavioural control. $w_1$, $w_2$ and $w_3$ refer to the weights of these respective variables.

Based on TPB, actual behaviour refers to an observable manifestation of a behaviour, which is performed or not performed with respect to a particular target, in a given situation, at a specific time [9]. Actual behaviour is a joint function of intention and perceived behavioural control [1], nevertheless, it is suggested that the most important antecedent of volitional behaviour is the intention [20].

Since its development, TPB has been used to study the behavioural intention and actual behavioural with their antecedents in many fields. This includes the internet banking adoption ([26], [32]), information technology usage ([19], [2], [31], [7], [28], [25]), perception of government to citizen services ([17]), physical activities intention ([6]),

union workers participation in employee involvement ([8]), entrepreneurial intention ([11]), environmental behaviour ([14]), advertisement ([20]), food consumption ([29]).

Empirically, the attitude towards behaviours was identified as having a significant positive influence on the behavioural intention. For instance, the findings of [25] revealed that among the three antecedents of behavioural intention, attitude has the highest significant influence on accountants' intention to adopt information technology. In another context, [8] found that attitude has a high positive significant influence on the union workers' decision to participate in employees' involvement.

The above results were also similar to those of [20], [29], [7], [30], [31], [19], [21], [32], [26]. As far as attitude is concerned, none of the previous studies using TPB found that attitude has insignificant effect on behavioural intention. This suggests that attitude is a major construct in the TPB model.

On the other hand, subjective norm has also been empirically proven to be an important and significant factor in determining the behavioural intention. In this regard, [11] found that subjective norm has a significant positive influence on business students' entrepreneurial intention. Similar results were also obtained by [25], [21], [19], [31], [30], [8], [7], [20], [29]. Nevertheless, [26], [32] and [6] found that subjective norm has no influence on the behavioural intention. This could be due to the nature and culture of the studied groups in these three cases.

The third antecedent of behavioural intention i.e. perceived behavioural control was also found to be a significant predictor of behavioural intention in the previous studies. In this context, [20] found that perceived behavioural control has a positive significant influence on the intention to use online video advertising. Similar results were also found by [8], [25], [32], [21], [19], [31], [30], [20]. Nevertheless, [26] found that perceived behavioural control has insignificant influence on the behavioural intention.

With regard to the actual behaviour, [26] found that its main predictor in the behavioural intention. The same results were obtained by [31], [30], [20]. Nevertheless, [32] found that both behavioural intention and perceived behaviour control predict actual usage, with intention having more influence on the actual behaviour.

Thus, based on the above model, the following hypotheses are posited:

*H1*: Attitude has a positive influence on the intention to adopt Islamic insurance.

*H2*: Subjective norm has a positive influence on attitude towards Islamic insurance.

*H3*: Subjective norm has a positive influence on the intention to adopt Islamic insurance.

*H4*: Perceived behavioural control has a positive influence on the intention to adopt Islamic insurance.

*H5*: French Muslims are willing to shift to Islamic insurance services.

## 2 Methodology

The study focuses on the French Muslim population. The target sample size was 100 respondents determined through the previous similar studies in this area [24], [16], [27], [23]. Out of the distributed questionnaires only 67 were properly and completely filled up and returned. Thus, a response rate of 67 per cent was achieved.

The survey questionnaire was designed to collect information about the perception of the customers towards the attributes of the *takaful* as well as their intention to adopt it in their future transactions. For measuring this information, Likert type scaling was used (1 = Strongly Disagree and 7 = Strongly Agree). Fourteen items were listed in this section and most of them were derived from the previous studies conducted in other countries as highlighted above, as well as from current *takaful* literature with necessary adaptations made for the specific context of the study. The second section of the questionnaire explored information about respondents' profile, i.e. gender, age, marital status, employment status, etc. The questionnaire was made in English and was subsequently translated into French and distributed as such.

The data gathered were subsequently analysed using structural equation modelling and one sample t-test. The choice of this technique was inspired from [12] as well as from similar studies conducted in this area. It is worth mentioning that the analysis was done through AMOS 18 and SPSS 18.

The demographic information indicates that 61.2 per cent of the respondents are male, while 38.8 per cent are female. In terms of age grouping, majority of the respondents are between 20 and 30 years i.e. around 75%, while the remaining 25% are between 31 and 50 years. Overall, around 82 per cent are single while the remaining 18 per cent are married.

Regarding the level of education, around 65 per cent are holding a bachelor's degree, 22% are holding Master's degree, while the remaining 13 per cent are holding a baccalaureate. 78 per cent of the respondents are students, and the remaining 22 per cent are working in the private sector.

## 3 Results
### 3.1 Descriptive analysis

Before proceeding to data analysis and hypotheses' testing, it is required to firstly inspect and analyse the overall properties of the data. The initial results in Table 1 show the means and standard deviations for the four constructs of the model. It is shown that the means are all beyond the neutral point of the scale i.e. 4. This initially indicates that the respondents have a tendency to accept Islamic insurance as an alternative to the conventional insurance. Likewise, the results show the positive attitude that the respondents have vis-à-vis Islamic insurance, as well as their perceived control over their decision, and the possible social influence that can affect their decisions. Nevertheless, these are merely initial analyses that will be tested for significance in the following sections.

Table 1: Descriptive statistics

|  | Intention | Perceived Behavioural Control | Attitude | Subjective Norm |
|---|---|---|---|---|
| Mean | 5.2786 | 4.6866 | 5.1851 | 4.2886 |
| Std. Deviation | 1.60134 | 1.31410 | 1.56566 | 1.47698 |

### 3.2 Validity measures

In applying structural equation modelling, the validity of the model is an important requirement. Validity of the model means that the items measuring a specific construct have a high common variance among each other, the constructs of the model are significantly different from each other, and the interactions between the constructs are justified in the theory. These three conditions represent convergent validity, discriminant validity as well as nomological validity, respectively. Beside these three types of validity, there is also face validity which is established based on interaction with professionals in the field of research.

According to [12], convergent validity can be measured through three main instruments i.e. factor loadings of the construct, average variance extracted (AVE) as well as the reliability measures e.g.

Cronbach Alpha. In this regard, the Cronbach Alpha should be 0.6 and above, while AVE and the factor loadings should be at least 0.5.

By referring to Table 2 below, it is observed that all the Cronbach Alpha are greater than 0.6, and the AVE values are all above 0.5, likewise, the factor loadings were all greater than 0.5. This indicates that all the thresholds are met, and hence the model achieves convergent validity.

Table 2: Convergent validity measures

| Construct | Cronbach Alpha | AVE |
|---|---|---|
| Attitude | 0.954 | 0.846 |
| Subjective Norm | 0.855 | 0.783 |
| Perceived Behavioural Control | 0.670 | 0.608 |
| Behavioural Intention | 0.913 | 0.854 |

The second type of validity if the discriminant validity, it can be measured using several tools. In the current study, it will be done by setting the correlation between two constructs to 1, and then compare the fit indices of the restricted model with the baseline model. Table 3 below shows the Chi square value and the degrees of freedom for both models. The change in the degrees of freedom is 6, while the change in the Chi Square value is 28.416. By comparing the latter with the Chi Square extracted value corresponding to a degree of freedom of 6 and a confidence margin of 0.05, we find a value of 12.59 which is lower than the Chi Square difference. Hence we can conclude that the model achieves discriminant validity.

In addition, face validity was also ensured by consulting with experts in Islamic insurance and financial services marketing. And finally the nomological validity was verified by looking at the interaction between constructs.

Table 3: Discriminant validity measures

| Elements | Chi square | DF |
|---|---|---|
| Baseline model | 147.065 | 71 |
| Restricted model | 175.481 | 77 |
| Change | 28.416 | 6 |

Finally, the model fit in Table 4 below show a Chi square value of 217.792, an RMSEA value of 0.175, a normed Chi Square value of 3.025, and a CFI value of 0.841. These are acceptable model fits as suggested by [5], [15] as well as [18].

Table 4: Model fit indices

| Model | NPAR | CMIN | DF | P | CMIN/DF | RMSEA | CFI |
|---|---|---|---|---|---|---|---|
| Default model | 33 | 217.792 | 72 | .000 | 3.025 | .175 | .841 |
| Saturated model | 105 | .000 | 0 | | | | 1.000 |
| Independence model | 14 | 1010.675 | 91 | .000 | 11.106 | .391 | .000 |

## 3.3 Hypotheses' testing

Since the validity of the model is established, the next step is the hypotheses' testing through structural model. It is worth noting that there are five hypotheses, four of them are tested through SEM. The results in Figure 2 and Table 5 indicate that attitude has a significant influence on the intention to adopt Islamic insurance services by Muslims in France. Hence, hypothesis 1 is supported. This is in line with the findings of [25], [8], [20], [29], [7], [30], [31], [19], [21], [32], [26].

Likewise, subjective norm was found to have a significant positive influence on the attitude towards Islamic insurance services. Hence, hypothesis 2 is supported as well. However, subjective norm does not have any significant influence on the adoption intention. Thus, hypothesis 3 is rejected. This is in line with the findings of [26], [32], [6]. Nevertheless, it contradicts with the findings of [11], [25], [21], [19], [31], [30], [8], [7], [20], [29]. This suggests that subjective norm might have an influence on customers' adoption of *takaful* in France only through changing their attitude, in the sense that it does not have any direct influence on the behavioural adoption. This indicates that the perception and attitude of French Muslims about *takaful* products and probably other Islamic related products has been influenced by their social environment.

Finally, perceived behavioural control was found to have a significant positive influence on the behavioural intention. Hence, hypothesis 4 is supported. This is similar to the findings of [20], [8], [25], [32], [21], [19], [31], [30]. Nevertheless, these findings contradict with those of [26]. This could be mainly due to cultural differences between the two population samples.
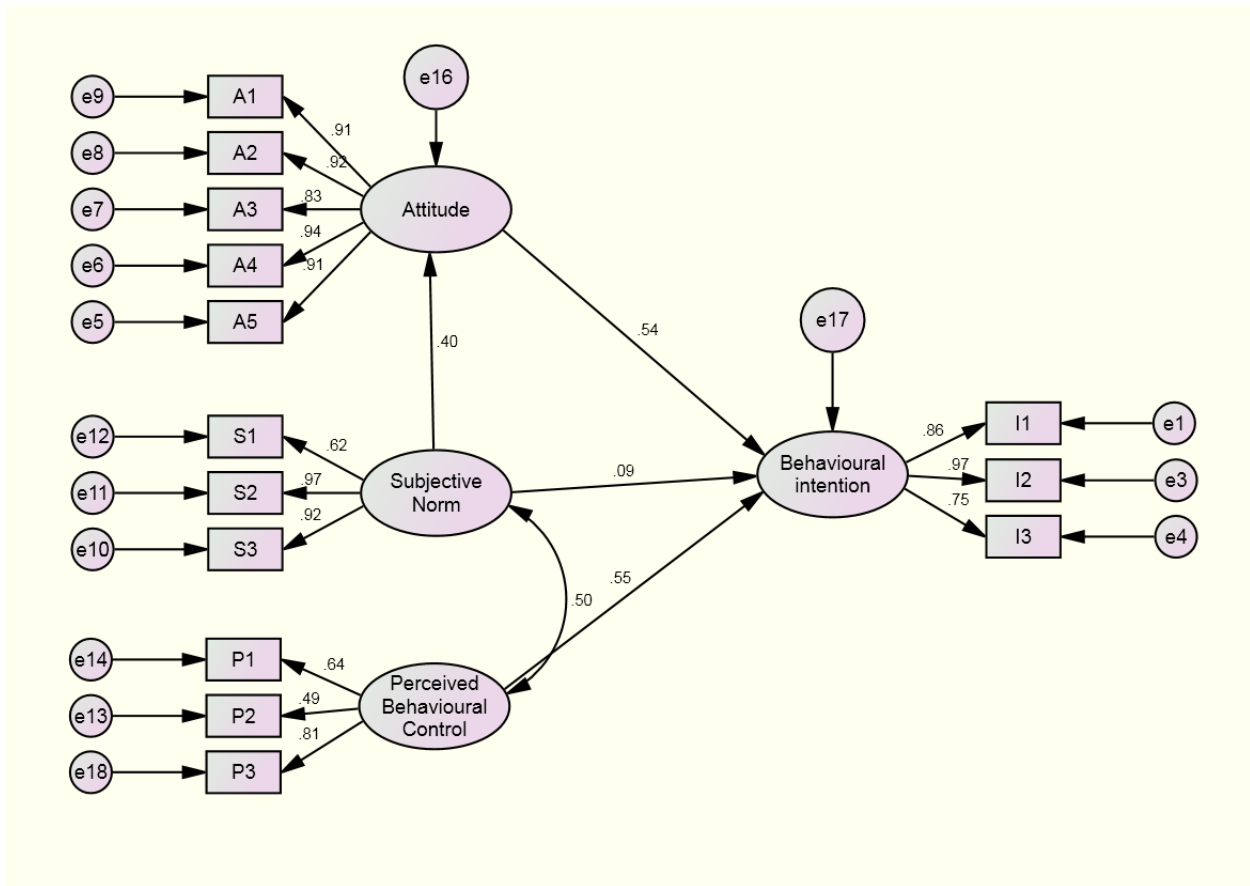
Fig.2: Structural model

Table 5: standardised total effects

|  | Perceived Behavioural Control | Subjective Norm | Attitude |
|---|---|---|---|
| Attitude | .000 | .405 | .000 |
| Behavioural intention | .553 | .091 | .544 |

### 3.4  t-test

In order to inspect whether the Muslim customers in France are willing to shift to Islamic insurance services, one sample t-test is employed. The results in Table 6 indicate that the mean difference is positive for all the items as well as the intention construct. It is also shown that these mean difference values are all significant, which means that the respondents are willing to shift to Islamic insurance services, depending on the above mentioned factors. Hence hypothesis 5 is supported.

Table 6: One sample t-test

|  | Test Value = 4 | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  | Mean | 95% Confidence Interval of the Difference | |
|  | t | df | Sig. (2-tailed) | Difference | Lower | Upper |
| Intention | 6.536 | 66 | .000 | 1.27861 | .8880 | 1.6692 |
| I1 | 6.367 | 66 | .000 | 1.373 | .94 | 1.80 |
| I3 | 5.198 | 66 | .000 | 1.119 | .69 | 1.55 |
| I2 | 6.566 | 66 | .000 | 1.343 | .93 | 1.75 |

## 4  Discussions and conclusions

The main objective of the study was to examine the willingness of the Muslim customers in France to shift to the relatively new Islamic insurance services, and the factors that may influence their decision. The results indicated that subjective norm

has a strong positive influence on the attitude towards Islamic insurance services. Similarly, attitude and perceived behavioural control were found to have a positive influence on customers' intention to adopt Islamic insurance services. Furthermore, the results indicated that the customers are willing to the Islamic alternative of insurance.

These results have great implications for the body of knowledge, practitioners and policy makers. Specifically, the study extends the theory of planned behaviour to a different setting as well as a different field of study. Similarly, the study provides great guidance for policy makers and practitioners that should take these considerations into account to establish a strong ground for Islamic insurance services to succeed in France and similar countries.

Nevertheless, the study has a number of limitations that should be taken into account in the future studies. Firstly, the sample is relatively limited; hence the results cannot be extended to the whole Muslim population in France. Similarly, the results take into account only Muslim customers while they do not consider the majority Christian portion. Thus, future studies are recommended to select a more representative sample in terms of religion.

The future studies are also recommended to extend the studies in this area, by focusing on similar countries e.g. Canada, Spain, etc. Finally, the future studies are recommended to use a more comprehensive framework such as decomposed theory of planned behaviour (DTPB), mainly due to the uni-dimensional structure in TPB.

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