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# The sociodemographic indicators of travel insurance fraud: motivations, emotions, and behaviours

*Dr Gonzalo Díaz-Meneses*

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## Abstract

This work centres on the study of travel insurance fraud, with the aim of identifying the psychographic and behavioural responses involved in claiming an insurance policy through simulating injury or loss. To be specific, five types of motivation (fun, compensation, revenge, profitability, and family interest), nine types of emotion (love, surprise, disgust, anger, shame, sadness, trust, fear, and pride), and three types of behaviour (without personal damages, at destination, and with personal damages) have been found to be related to travel insurance fraud. In order to facilitate the detection of dishonest claims, the relationship between these psychographic, as well as behavioural features, and four sociodemographic variables, have been visualised - principally gender, age and education, and, to a lesser extent, income. Therefore, the results of the empirical survey carried out on a sample of 334 travel insurance policy holders and following a snow ball procedure not only give insight into dishonest motivations and conduct, but also make it possible to detect this kind of fraud.

**Keywords:** Insurance fraud, motivation, emotion, behaviour, sociodemographic.

## Introduction

After tax evasion, insurance fraud is the most serious 'white collar crime' not only in terms of frequency, but also in terms of the cost (Miyazaki, 2009), with travel insurance fraud being the costliest for the tourism sector (Clarke, 1989). False reports for lost luggage, medical coverage, and cancellations represent some of the dishonest ways in which clients make claims (Calloway & Williams 2011). These represent a big problem since, while the contract itself often entails a small payment on behalf of the client, the compensation implies a significant pay-out (Baldock, 1997); and because it almost inevitably happens far from where the contract was agreed, and is thus often difficult to detect. Therefore, this research paper sets out the objective of profiling the sociodemographic features of dishonesty as a way of proposing clear indicators, or clues, as to the odds of fraud being committed and its subsequent detection.

Furthermore, in order to complement the visualisation provided by socio-demographics, the second objective of the current paper consists of revealing the motivational, emotional, and behavioural logic of fraud responses, so that dishonesty can be not only more easily detected, but also much better understood.

For this reason, it would be interesting to understand fraudulent responses in order to optimise risk management measures (Derrig 2002), by an integrative approach comprising not only the opportunistic reactions based upon a hedonic framework (Brikmann & Lesch, 2011), but also the planned and cognitive responses explained by the planned reasoned action model (Fukukawa & Ennew 2010; Fukukawa, 2002). With this aim in mind, and distinguishing two

different kinds of model - the hedonic and the cognitive (Tennyson 2008) - the current research sets out the objective of bringing into focus emotional, as well as intellectual, variables. To be specific, firstly it identifies the motivation in terms of the drive for dishonesty (Fullerton & Punj 2004, 1997) and the perception of the insurance contract and cost (Miyazaki, 2009), as well as the company (Tennyson, 2002) and the insurance product (Diacon & Ennew 1996). Besides the motivation, it looks at the evaluations of the insurance company (Dean 2004; Tennyson, 2002; Wilkes 1978) and the emotions felt by clients (Picard, 1996). Finally, it sheds light on dishonest client conduct in general (Fukukawa & Ennew 2010; Neale & Fullerton 2010; Mitchell & Ka Lu Chan 2002; Fullerton & Punj 1997) and the insurance fraud conduct associated with travelling in particular (Brinkmann & Lesch, 2011; Tennyson, 2008).

## **Review of relevant literature**

The causes of white collar crime are lesser known than those of street crime (Simpson, 2013), since the motivations are more complex and versatile (Benson & Moore, 1992). The multidimensionality and changeability of such actions might be described by making good use of the sociodemographic approach. Firstly, the theory of social control accounts for the relationship between age and the motivation to commit crime by pointing out that young people move in the kind of social circles that might facilitate the development of a predisposition towards crime. By contrast, this social influence changes substantially in adulthood, when individuals have more possessions and a higher social status that could be lost if they committed a crime (Greenberg, 1985). Similarly, Marvell & Moody (1991) state that peer group pressure is a key variable in explaining crime during adolescence, while the ability to weigh up the long term consequences of committing criminal acts against the temptation to procure immediate gains, the existence of greater legal penalties given to adults and repeat offenders, and opportunities for gainful, legitimate employment function as barriers to crime as a person grows older. Finally, Sweeten et al. (2013) also propose sociological and psychological explanations for crime, such as that in adulthood there are more routines and structured social activities that disincentive and discourage one to commit criminal acts.

In reference to gender and the motivation to indulge in white collar crime, the theory of procedural justice and legitimacy might support the notion that both genders demonstrate a significant connection to particular social roles and functions related to crime. In addition, regarding the strain theory, it is possible to consider frustration and sexual discrimination as one of the key factors in crime. Moreover, by proposing social learning theory, the importance of socialisation within a certain group in which gender attitudes are modelled is highlighted. Finally, putting forward opportunistic theory results in the explanation that males and females face different circumstances because of their assigned social functions (Holfseter, 2015).

Finally, and regarding education, utility theory might be posed to support the statement that any gain associated with illegitimate behaviour is a function of gross returns and various costs, such as monetary and psychological, which are higher if one is more highly educated (Juster, 1975). On this basis, the first hypothesis is put forward:

- *H1. The sociodemographic characteristics of the client are associated with the motivation to make fraudulent claims.*

The relationship between emotion and crime is very old since, traditionally, crime was considered to have physiological roots related to mental health and spiritual degradation (Juster, 1975). Thus, it was stated that criminals were shown to demonstrate a lack of guilt but were susceptible to feeling a great deal of embarrassment due to public humiliation (Murphy & Harris, 2007). Moreover, they were seen as arrogant in ignoring the law and often masked their motives behind altruistic acts (Benson, 1985). Furthermore, criminals were considered sensitive to public shaming, often showing anger and questioning the legitimacy of the law (Benson, 1990). Criminals also tend to process less empathy and are less expressive (Alalehto, 2003). To be more specific, Langton & Piquero (2007) state that white collar offenders process negative emotions towards their surroundings due to their failure to achieve their objectives, the elimination of positive stimulation, and the presence of negative stimuli. These authors explain that their motivation is very emotional and rooted in extreme feelings of stress, caused by frustration, financial concerns, and impulsiveness.

In this context, education is considered as being a powerful modification mechanism in achieving functional emotions (Juster, 1975). For example, in accordance to Machin et al. (2011), risk aversion and patience are factors stemming from education that reduce criminality. In reference to gender, some authors point out that women commit fewer crimes due to the fact that they have less access to power and more aversion to risk (Gottschalk & Glaso, 2013). Similarly, it is interpreted that there are fewer reasons for women to feel remorse given that white collar crimes are predominantly committed by men (Dodge et al., 2013). Likewise, masculinity theory, regarding low self-control and risk seeking, sets out the relationship between gender and crime through emotions (Blackwell & Piquero, 2005).

Regarding age, testosterone levels and the innate recklessness of juveniles connect age with crime by making good use of an emotional theoretical framework (Marvell & Moody, 1991) and considering a certain degree of biological fatalism (Sweeten et al. 2013). On this basis, the second hypothesis is put forward:

- *H2. The sociodemographic characteristics of the client are associated with the emotions underlying fraudulent claims.*

Consistently with motivation and emotion, sociodemographic features show a significant association with criminal behaviour. Firstly, the evidence that age and crime are highly and inversely correlated is quite well-accepted, since the younger a person is, the more likely they are to commit criminal acts. Nevertheless, it is not due to mere biological reasons, since the older, more experienced criminal may acquire the skills needed to evade detection and tends to commit fewer crimes in groups. Moreover, there have been many methodological shortcomings in previous research works, with results that tend to overrate the importance of biological reasons related to age (Marvell & Moody, 1991). In fact, despite adolescence being a stage of life associated with higher levels of criminality and risk, the reasons are more sociological, stemming from peer group influence and psychological causes rooted in impulse control processes and cognitive development (Shulman et al., 2013; Sweeten et al., 2013). Finally, according to Lauritsen (1998), age might be overestimated as a factor due to the fact that many of the studies are longitudinal, with the survey taker asking for information regarding crimes that occurred in the distant past that the respondent tends to modify according to their present circumstances rather than the reality of their past.

Gender is another key variable, since males are responsible for the vast majority of violent crimes (Piquero, 2000), and so are more likely to have to choose to give up delinquency than females when they reach adulthood (Piquero et al., 2005). In addition, it is clear that there exists specialisation in regards to the kind of crime as a function of gender, whose specificity persists more in women than in men (Mazerolle et al., 2000). Furthermore, although there are more white collar crimes committed by men than by women, this gap has been decreasing in recent times (Holfseter, 2005, Steffensmeier & Allan, 1996) since while men used to have more access to power and women tended to show more risk aversion (Gottschalk & Glaso, 2013), this is becoming less and less the case. Finally, the chronic offender does not show significant differences in terms of sex, since permanent non-violent criminal figures show a similar number of obstinate responses and gender does not determine any difference.

In reference to income and social class, it seems evident that if there is more income inequality, there are more crimes (Choe, 2008). Nevertheless, it is controversial to define white collar crime by more strongly emphasising the high social position held by an individual (Weisburd et al., 2006; Aubert, 1952) rather than the abuse of trust committed by someone who takes up some form of power control (Shapiro, 1990).

No doubt, income and education affect the probability of acting in a criminal manner (Yildiz et al., 2013). So, education reduces crime through labour market opportunities since the employment and wage rate increases, as does the opportunity cost of criminal behaviour, incorporating a civic component that inculcates a distaste for a life of crime (Usher, 1997). In addition, school attendance reduces the time available for participating in criminal activities (Buonanno & Leonida, 2009). By contrast, the rate at which white collar crimes are committed seems to decline less (and may even increase) with age and education (Lochner, 2004). On this basis, the third hypothesis is put forward:

- *H3. The sociodemographic characteristics of the client are associated with the behaviour related to fraudulent claims.*

## **Methodology**

A survey was carried out with a structured questionnaire following a snow ball sampling procedure in order to gather information about the motivations, emotions, and behaviours related to insurance fraud within the tourism sector. A sample of 334 individuals was reached in 2015. To be specific, forty students of the market research course passed a self-administrated questionnaire to members of their intimate social circles so that a high trust atmosphere was guaranteed in order to obtain sincere responses about this delicate matter. In fact, the respondents remained anonymous thanks to the survey taker collecting the questionnaire confidentially and handing it in to the survey manager without any personal information, and making good use of an identification code system.

The characteristics of the sample are laid out in table 1.

The characteristics of the measuring instruments are as follows:

Fraud motivation and emotion are comprised of two non-comparative scale questions of the Likert type, consisting of five points, where the respondents express their reasons and

sentiments in cases where they have made exaggerated or fabricated claims related to their travel insurance policies. The motive scale has 21 variables and is based on Fisk et al. (2010), Brinkmann & Lentz (2006), Dean (2004), Mitchell & Ka Lu Chan (2002), Tennyson (2002), Fullerton & Punj (1997), Vitell et al. (1991), and Wilkes (1978). The scale of emotion consists of 40 variables and is based on Brinkmann (2005), Fullerton & Punj (2004, 1997), and Picard (1996).

Dishonest claim responses are gathered by a ten-point, non-comparative scale of the Stapel type with 21 variables inspired from Neale & Fullerton (2010), Fisk et al. (2010), Fullerton & Punj (2004), Artís et al. (1999), and Tennyson (2002). This question asks for the respondents' opinion about people - or clients - who would entertain the possibility of exaggerating or fabricating an incident in order to claim on travel insurance.

## **Analysis of results**

Prior to testing the hypotheses, three exploratory factor analyses regarding the scales of motivation, emotion, and behaviour, and the corresponding Cronbach alpha tests, were carried out in order to check the validity and reliability of these measuring instruments. Once the dimensions of these scales were extracted, and with the aim of testing the hypotheses, three Anova tests were performed to check the causal role played by sociodemographic characteristics on the three psychographic variables mentioned, so allowing the dishonest responses to be visualised.

### ***Analysis for contrasting hypothesis 1***

Five dimensions have been extracted from the motivational scale, after carrying out an exploratory factor analysis. The first factor is labelled as “justifiable for harmless actions against unscrupulous staff” since it refers to the belief that there are dishonest staff working for insurance companies and the action taken by clients is considered to be harmless, or “just a bit of fun”. The second factor is labelled “revenge”, considering that, according to some respondents, insurance companies often take advantage of their clients by failing to pay out what they should. The third factor is labelled “profitable for the dishonest customer”, which refers to the selfish but rewarding interests behind the development of these claims on the part of the client. The fourth factor is labelled “fair compensation” and makes reference to those who consider the claim as a reasonable and proportional return on the insurance policy. Finally, the fifth factor is labelled “family motivated” since the drive to make a claim stems from the defence of family interests and develops under their support (see table 2).

An Anova analysis was established to test the first hypothesis, and the obtained results lead us to state that while neither gender, nor income influence fraud motivation, age and education have a significant causal influence on the motivation to commit fraud. To be specific, the motivation to commit fraud based on the notion of obtaining “fair compensation” is associated with older clients, whereas the motivation labelled “family motivated” is associated with younger claimants. In addition, both the motivation for the categories labelled “revenge” and “justifiable for harmless action against unscrupulous staff” are associated with lower levels of education. However, the motivation to claim reasonable and proportional compensation is linked to education, albeit without a clear profile level. On this basis, the first hypothesis is verified (see table 3).

### ***Analysis for contrasting hypothesis 2***

In second place, and regarding the dimensions represented by the nine factors describing the emotional responses for fraud insurance, it might be pointed out that every factor could be labelled differently and according to the affective attributes mentioned in each item within each factor. Thus, the first factor is labelled “love and sympathy”, the second “surprise”, the third “disgust”, the fourth “anger”, the fifth “shame”, the sixth “sadness”, the seventh “trust”, the eighth “fear”, and the ninth “pride” (see table 4).

In order to contrast the second hypothesis, an Anova test was carried out, and it might be stated that, except for income, every sociodemographic characteristic can be shown to have a significant influence on the emotions related to committing fraud. To be specific, the emotions of “sadness and trust” are associated with older claimants. Moreover “love and sympathy”, “surprise”, “trust” and “pride” are linked to particular levels of education, with men being more heavily associated with the “surprise” factor. Thus, hypothesis 2 is accepted (see table 5).

### ***Analysis for contrasting hypothesis 3***

Thanks to the factor analysis performed on the behavioural scale, it has been possible to identify three different dimensions. The first factor has been labelled “without personal damages” since it is characterised by compensation for goods, money, and services. The second factor, labelled “fraud with effect at destination”, gathered coverage services claimed while the client was at the destination. Thirdly, the factor labelled “with personal damages” makes reference to compensation after an individual (or individuals) had been involved in an accident and physically injured (see table 6).

Similarly, as the Anova test demonstrates the relationship between every sociodemographic characteristic and the three types of behaviour related to fraud, the third hypothesis is confirmed. To be specific, it seems clear that the younger and wealthier an individual is, the more behaviour associated with fraud seems to appear. Moreover, males are more likely than females to commit this kind of white collar crime. Education shows a significant but ambivalent causal role in producing fraudulent conduct (see table 7).

## **Conclusion**

The detection of fraud in the travel insurance sector is important and complex. It is important not only due to its ethical seriousness, since it damages trust in the insurance system, but also because of the negative economic impact on the insurance company’s profits, as well as on the costs payed by clients due to the increase in insurance policy premiums. Consequently, the present research work gives insight into the motivations, emotions, and behaviour involved in travel insurance fraud by identifying, listing, and understanding the motives, affections, and conduct of customers when they make a dishonest claim.

Fraud detection is complex, given that dishonest acts performed by customers have a low level of visibility, since, obviously, the claimants do not demonstrate psychographic transparency in their responses and these psychological causal factors haven’t been described visually by taking into account variables such as sociodemographic features so far. With this reasoning

in mind, with the empirical findings obtained, it has been possible to draw clear links between the specific motives behind fraud in regards to emotions and behaviours, as well as several sociodemographic characteristics such as gender, age, education, and income. Thus, the sociodemographic features of claimants might be considered indicators of the motives for an individual to commit fraud and the emotions and behaviours underlying them, as well as representing objective keys to success in regards to prevention and education carried out with the maximum efficiency and efficacy (see figure 1).

To be specific, it is noteworthy that white collar crime indicators are numerous and varied in the case of education, given there are multiple motives, emotions, and behaviours connected to volition. However, more ground breaking evidence regarding education as an indicator is needed, considering that its links to white collar crime are not only contradictory, but also very emotional. Hence, efforts to develop theory and hard, empirical evidence are in short supply, especially doctrines that could account for the emotional responses stemming from a particular educational background.

In contrast, there is a notable lack of key indicators to link income to emotions and motivations. In fact, the behavioural response “without personal damage” is the only link between crime and income borne out by the results of the present study.

In addition, one might credit gender as a non-cognitive indicator, since rather than any particular motivation, we find that it is the ‘emotional surprise’ and the behavioural response associated with the “without personal damages” factor that are connected to crime. On this basis, the significance of risk appeal, testosterone, and any other biological theory to explain why men are more prone to criminality, might be highlighted. Therefore, theories based upon Procedural Justice, Legitimacy, Strain, Social Learning, and Specialisation do not appear valid for arguing that the lesser inclination of women towards white collar crime is due to the emotional and behavioural nature of the relationship between gender and delinquency.

Finally, age is proven as a key factor in detecting white collar crime, and it is particularly interesting how this sociodemographic feature is driven in a balanced way not only by specific motivations, but also by emotions. For this reason, the age indicator allows us not only to guide crime detection in a straightforward manner, but also to shed light on it thanks to a solid and broad theoretical framework regarding social as well as biological theories.

Subsequently, the current research has deemed it necessary to start off with an understanding of precisely what a fraud response is from a psychographic point of view, and afterwards to define as accurately as possible the sociodemographic clues that might lead to an incident being judged as fraud. On this basis, the development of competitive advantages might be designed for the sake of the vast majority of honest clients and insurance companies.



## Tables

Table 1: Sample characteristics

Gender			Age			Education			Income		
	N	%		N	%		N	%		N	%
Male	154	46,1	18-24	83	24,9	Without	17	5,1	>10,000<20,000	68	20,4
Female	180	53,9	25-34	96	28,7	Primary	92	27,5	>20,000<40,000	148	44,3
			35-49	58	17,4	Secondary	95	28,4	>40,000<100,000	67	20,1
			50-64	60	18,0	Graduate	92	27,5	>100,000<400,000	24	7,2
			>65	37	11,1	Postg.	38	11,4	>400,000	25	7,5

Table 2: Exploratory factor analysis on the fraud motivation scale

C	Items	1	2	3	4	5
0.68	Many insurance company employees are unscrupulous and it is therefore justifiable to make these kinds of claims	<b>,76</b>	,20	-,10	,12	,16
0.64	Being overly dramatic about the circumstances behind a claim is just a bit of fun and does not harm anyone	<b>,75</b>	,12	,22	,01	-,14
0.63	The staff of insurance companies are often complicit in their practices and it is therefore justifiable to make these claims	<b>,65</b>	,23	-,08	,15	,33
0.56	Simulating or exaggerating the circumstances behind a claim is essentially harmless	<b>,65</b>	,15	,34	-,02	-,02
0.67	Insurance companies deserve to be the victims of these exaggerated claims because they sometimes abuse the trust of their clients	,06	<b>,79</b>	,12	,10	,13
0.67	Insurers often have a very bad reputation and therefore deserve these exaggerated claims from their clients	,42	<b>,65</b>	-,12	,22	,06
0.50	As insurers' practices are sometimes questionable, the client has the right to make the most of their policy	,22	<b>,63</b>	,02	,22	,05
0.47	Insurers sometimes fail to pay out what they owe and therefore simulating or exaggerating the circumstances behind a claim is justified	,20	<b>,58</b>	,24	,04	-,19
0.59	Claims like these are profitable and beneficial to the client	,01	-,02	<b>,72</b>	-,05	,25
0.54	Exaggerating the circumstances behind a claim carries little risk and can be very rewarding	,14	,13	<b>,69</b>	-,12	,10
0.49	The client should make these exaggerated claims because it makes financial sense and is a good way to get money	,01	,13	<b>,62</b>	,30	-,03
0.60	Insurance premiums continue to rise regardless of whether a claim is made	,03	,12	,16	<b>,74</b>	-,12
0.60	The insurer charges an extortionate amount of money without really having to provide a genuine service and therefore the Company profits at the expense of the client	-,05	,30	-,00	<b>,68</b>	,20
0.58	The client is just looking for a fair return on the Premium they pay for their insurance policy	,27	,05	-,11	<b>,68</b>	,17
0.63	Clients who dramatize the circumstances behind a claim may find support from family, friends and close acquaintances	-,00	-,08	,27	,08	<b>,73</b>
0.60	For the client, making a claim like this and receiving remuneration represents a real challenge	,09	,40	-,04	-,00	<b>,65</b>
0.47	Claimants who are overly dramatic about the circumstances of their claim are only acting in the interests of their families	15	-,11	,38	,19	<b>,49</b>

KMO: 0,792; Bartlett: 1391,388, GL: 136, sig.: ,000; Explained variance: 58,893; Cronbach Alpha: 0,801

Table 3: Anova: fraud motivation & sociodemographic features

		Age				Education				Income				Gender			
		N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig
<b>M1</b>	1,0	83	-,08	1,92	,10	17	-,13	2,62	,03	68	-,01	1,59	,17	154	,07	1,511	,22
	2,0	96	,22			92	,26			148	,13			180	-,06		
	3,0	58	-,18			95	-,14			67	-,13						
	4,0	60	-,04			92	,00			24	-,00						
	5,0	37	-,04			38	-,21			25	-,31						
	Total	334	,00			334	,00			332	,00			334	,00		
<b>M2</b>	1,0	83	-,15	,76	,55	17	,04	3,26	,01	68	,05	,24	,91	154	,00	,004	,95
	2,0	96	,07			92	,28			148	,04			180	-,00		
	3,0	58	,09			95	-,11			67	-,04						
	4,0	60	-,01			92	-,03			24	-,12						
	5,0	37	,02			38	-,32			25	-,03						
	Total	334	,00			334	,00			332	,00			334	,00		
<b>M3</b>	1,0	83	,07	1,97	,09	17	,03	,46	,76	68	-,09	,68	,60	154	-,01	,095	,75
	2,0	96	,11			92	-,10			148	,00			180	,01		
	3,0	58	-,32			95	,05			67	,05						
	4,0	60	,00			92	,06			24	,25						
	5,0	37	,03			38	-,04			25	-,12						
	Total	334	,00			334	,00			332	,00			334	,00		
<b>M4</b>	1,0	83	-,21	4,04	,00	17	,32	9,72	,00	68	,12	1,81	,12	154	,00	,011	,91
	2,0	96	-,12			92	,48			148	,03			180	-,00		
	3,0	58	-,02			95	-,15			67	-,10						
	4,0	60	,37			92	-,27			24	-,44						
	5,0	37	,21			38	-,24			25	,13						
	Total	334	,00			334	,00			332	-,00			334	,00		
<b>M5</b>	1,0	83	,27	3,22	,01	17	,16	,36	,83	68	,25	1,88	,11	154	,04	,548	,46
	2,0	96	,04			92	,02			148	-,09			180	-,03		
	3,0	58	-,18			95	,04			67	,08						
	4,0	60	-,09			92	-,08			24	-,10						
	5,0	37	-,31			38	-,03			25	-,20						
	Total	334	,00			334	,00			332	,00			334	,00		

Table 4: Exploratory factor analysis on the emotions scale

<b>C</b>	<b>Items</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
.68	Making these claims is enjoyable	<b>,78</b>	,22	-,04	-,00	-,01
.67	I sympathise with these claimants	<b>,75</b>	,20	-,04	-,15	-,05
.69	I have no problem with these claimants	<b>,74</b>	,25	-,13	-,05	-,09
.61	I feel that the ability to make these claims should be valued	<b>,64</b>	,19	-,09	,03	-,08
.68	Making a claim like this should be a delight	<b>,52</b>	,49	-,05	-,10	,01
.72	Making a claim like this must be full of surprises	,10	<b>,82</b>	-,02	-,00	-,06
.75	Making a claim like this probably involves having an unforgettable experience	,22	<b>,80</b>	,05	-,03	-,02
.77	Making a claim like this must be exciting	,39	<b>,76</b>	,07	-,02	-,08
.69	Making a claim like this is a thrill	,21	<b>,74</b>	-,01	,01	-,06
.61	Making a claim of this kind should be a happy experience	,42	<b>,60</b>	-,03	-,07	-,06
.78	I feel disgust towards these claimants	-,00	-,05	<b>,84</b>	,13	,19
.81	I can't stand people who make these claims	-,14	-,00	<b>,81</b>	,13	,23
.67	I prefer to stay away from the kind of people who make these claims	-,10	,04	<b>,73</b>	,14	,22
.71	People who make these claims sicken me	-,15	,03	<b>,72</b>	,16	,24
.77	I feel angry about these claims	-,05	-,02	,14	<b>,81</b>	,16
.72	I get angry just thinking about these claims	-,01	-,05	,05	<b>,81</b>	,14
.76	These claimants make me angry	-,02	-,05	,21	<b>,78</b>	,18
.70	These claims annoy me	-,19	,02	,15	<b>,74</b>	,09
.81	These claims are in poor taste	-,16	-,10	,15	,11	<b>,83</b>
.68	I am ashamed that these claims are made	-,08	-,07	,15	,15	<b>,77</b>
.73	People who make claims like these should be ashamed of themselves	-,03	-,06	,30	,21	<b>,74</b>
.65	These claims are undignified and cheapen people	,02	-,00	,35	,12	<b>,67</b>
<b>C</b>	<b>Items</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	
.74	It depress me that these claims are made	<b>,79</b>	-,07	,15	,02	
.76	It saddens me that these claims are made	<b>,79</b>	-,11	-,00	-,02	
.60	I feel anxious about making these claims	<b>,71</b>	,13	,13	-,02	
.58	Making these claims is stressful and burdensome	<b>,70</b>	-,02	,09	,07	
.73	I'm not above making these claims	-,03	<b>,79</b>	-,09	,17	
.74	I am prepared to make a claim like this if necessary	-,06	<b>,78</b>	-,08	,15	
.57	Knowing that I can make this kind of claim reassures me	-,03	<b>,55</b>	-,01	,06	
.60	These claims don't shake my faith in people	,10	<b>,54</b>	,02	,03	
.65	These claimants should be made to feel like outcasts	,09	-,02	<b>,71</b>	,05	
.54	People who make these claims should fear physical or psychological damages	,01	,08	<b>,70</b>	-,05	
.53	People should feel apprehensive about making these claims	,14	-,15	<b>,63</b>	-,02	
.48	These claimants should prefer to forget the experience	,14	-,10	<b>,60</b>	,11	
.74	I respect these claimants	,05	,24	-,01	<b>,77</b>	
.65	People who successfully make these claims should boast to others about it	-,10	-,01	-,04	<b>,64</b>	
.52	These claimants should be proud of themselves	,11	,15	,11	<b>,55</b>	
.66	I feel a certain amount of admiration for these claimants	,03	,20	,08	<b>,53</b>	
KMO: 0,875; Bartlett: 7096,933, GL: 703, sig.: ,000; Explained variance: 67,935; Cronbach Alpha: 0.848						

Table 5: Anova: emotions factors & sociodemographic features

		Age				Education				Income				Gender			
		N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig
<b>Emo1</b>	1,0	83	,11	,97	,42	17	-,35	243	,04	68	-,14	1,73	,14	154	,06	1,25	,26
	2,0	96	,07			92	,00			148	,14			180	-,05		
	3,0	58	-,13			95	-,01			67	-,01						
	4,0	60	-,03			92	,20			24	-,12						
	5,0	37	-,18			38	-,30			25	-,29						
	Total	334	,00			334	,00			332	-,00			334	,00		
<b>Emo2</b>	1,0	83	-,06	,88	,47	17	,19	3,10	,01	68	,06	1,86	,11	154	,18	9,94	,00
	2,0	96	-,05			92	,19			148	,11			180	-,15		
	3,0	58	-,03			95	-,04			67	-,13						
	4,0	60	,05			92	,00			24	-,02						
	5,0	37	,26			38	-,45			25	-,40						
	Total	334	,00			334	,00			332	,00			334	,00		
<b>Emo3</b>	1,0	83	-,15	1,74	,14	17	,14	,93	,44	68	,10	2,02	,09	154	,08	2,09	1,4
	2,0	96	-,10			92	,11			148	-,11			180	-,07		
	3,0	58	,16			95	,01			67	-,01						
	4,0	60	,11			92	-,07			24	,46						
	5,0	37	,19			38	-,20			25	-,03						
	Total	334	,00			334	,00			332	-,00			334	,00		
<b>Emo4</b>	1,0	83	-,02	,74	,56	17	-,26	2,06	,08	68	-,04	1,02	,39	154	-,02	,14	,70
	2,0	96	-,09			92	-,03			148	-,08			180	,01		
	3,0	58	,18			95	-,02			67	,07						
	4,0	60	-,01			92	-,05			24	,31						
	5,0	37	,04			38	,41			25	,09						
	Total	334	,00			334	,00			332	-,00			334	,00		
<b>Emo5</b>	1,0	83	-,03	,37	,82	17	,14	,45	,77	68	,04	2,10	,08	154	-,04	,51	,47
	2,0	96	-,04			92	-,01			148	-,15			180	,03		
	3,0	58	,14			95	-,09			67	,21						
	4,0	60	-,01			92	,04			24	,26						
	5,0	37	-,00			38	,10			25	-,03						
	Total	334	,00			334	,00			332	-,00			334	,00		
<b>Emo6</b>	1,0	83	-,21	2,33	,05	17	-,21	,88	,47	68	,01	,82	,50	154	-,13	5,20	,02
	2,0	96	-,06			92	,14			148	-,02			180	,11		
	3,0	58	,08			95	-,08			67	,12						
	4,0	60	,26			92	-,03			24	,07						
	5,0	37	,09			38	,04			25	-,28						
	Total	334	,00			334	,00			332	-,00			334	,00		

Table 5 continued

		Age				Education				Income				Gender			
		N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig
<b>Emo7</b>	1,0	83	-.22	2.68	.03	17	.50	7.52	.00	68	.16	.67	.61	154	-.00	.00	.97
	2,0	96	-.07			92	.37			148	-.03			180	.00		
	3,0	58	.07			95	-.27			67	-.09						
	4,0	60	.27			92	-.18			24	.04						
	5,0	37	.14			38	.00			25	.01						
	Total	334	.00			334	.00			332	.00			334	.00		
<b>Emo8</b>	1,0	83	-.11	.91	.45	17	.15	.33	.85	68	.01	.17	.95	154	-.06	1.28	.25
	2,0	96	.14			92	.05			148	.00			180	.05		
	3,0	58	-.01			95	-.08			67	.03						
	4,0	60	-.08			92	-.00			24	-.06						
	5,0	37	.02			38	.02			25	-.14						
	Total	334	.00			334	.00			332	-.00			334	.00		
<b>Emo9</b>	1,0	83	-.10	1.43	.22	17	-.27	2.38	.05	68	.04	.10	.98	154	.00	.04	.84
	2,0	96	.08			92	.23			148	-.02			180	-.01		
	3,0	58	-.17			95	-.02			67	.03						
	4,0	60	.01			92	-.04			24	-.03						
	5,0	37	.24			38	-.27			25	-.05						
	Total	334	.00			334	.00			332	-.00			334	.00		

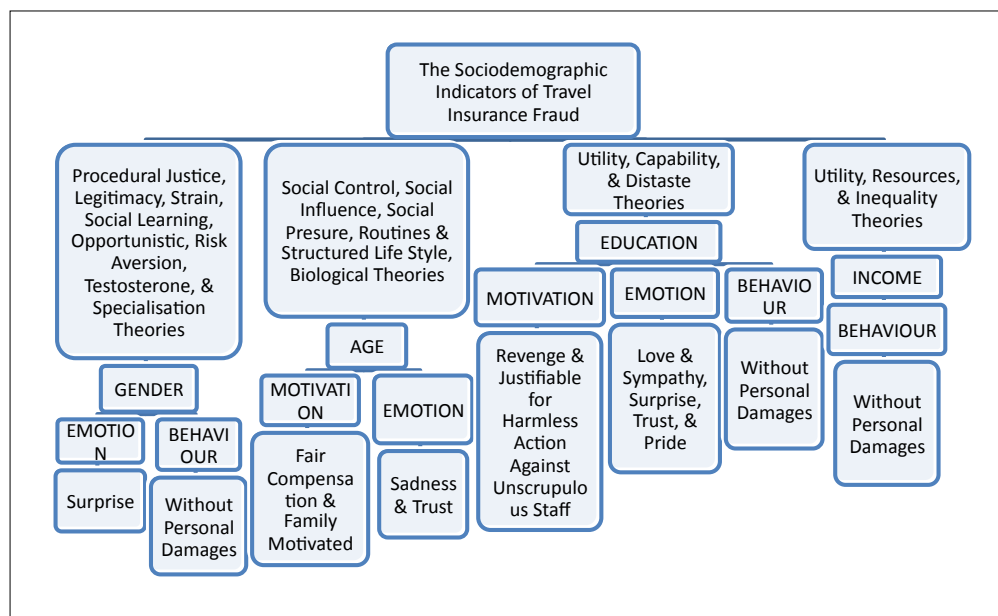
Table 6: Exploratory factor analysis on the fraud behaviours scale

<b>C</b>	<b>Items</b>	<b>1</b>	<b>2</b>	<b>3</b>
.68	Claims for stolen goods or money that was actually lost	<b>,81</b>	,10	,12
.78	Claiming for a missed flight or transport connection, having done so intentionally	<b>,80</b>	,07	,36
.77	Cancelling a transport booking in order to collect on a policy	<b>,77</b>	,18	,37
.79	Cancelling a hotel reservation in order to make an insurance claim	<b>,77</b>	,16	,41
.74	Making a lost luggage claim while still having possession of it	<b>,76</b>	-,02	,40
.80	Damaging one's own car for the insurance	<b>,72</b>	,06	,53
.54	Claiming for late delivery of luggage when the delay was not significantly prejudicial	<b>,71</b>	,17	-,01
.79	Intentionally causing a car accident for the insurance	<b>,69</b>	,04	,55
.64	Presenting fabricated documentation in order to collect on a policy when cancelling a holiday	<b>,63</b>	,19	,45
.54	Making a claim having known of an illness in advance of taking out an insurance policy	<b>,55</b>	,37	,32
.54	Cancellation of a trip due to an alleged family illness as grounds for collecting on an insurance policy	<b>,51</b>	,40	,35
.87	Taking out health insurance that includes expenses for hospital treatment, knowing in advance that it would be urgently required upon arrival	,11	<b>,92</b>	,08
.87	Taking out a policy that covers hospitalisation, knowing that this would be required	,14	<b>,91</b>	,07
.83	Taking out health insurance that includes surgery, knowing in advance that it would be necessary upon arrival	,13	<b>,89</b>	,11
.80	Taking out a policy that includes repatriation due to injury or sickness, knowing in advance that this would be required	,13	<b>,88</b>	,07
.74	Taking out insurance that covers repatriation in case of death, when there is prior knowledge of terminal illness	-,04	<b>,85</b>	,13
.73	Taking out health insurance, knowing in advance that consultation would be necessary upon arrival	,23	<b>,82</b>	,02
.70	Taking out a life insurance policy with the intention to commit murder	,13	,15	<b>,80</b>
.83	Taking out an insurance policy while feigning disability	,43	,12	<b>,79</b>
.84	Causing or contriving an accident or incident after taking out an insurance policy	,47	,09	<b>,77</b>
.86	Claiming an accident or incident with consequences to second and thirds parties	,51	,07	<b>,77</b>
KMO: 0,920; Bartlett: 7704,874, GL: 210, sig.: ,000; Explained variance: 75,152; Cronbach Alpha: 0.942				

Table 7: Anova analysis: Fraudulent conduct and sociodemographic characteristics

		Age				Education				Income				Gender			
		N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig	N	Mean	f	Sig
<b>Beha1</b>	1,0	83	,08	2.27	.06	17	-,30	3.76	.00	68	-,16	5.63	.00	154	.11	3.90	.04
	2,0	96	,12			92	,29			148	,28			180	,09		
	3,0	58	-,23			95	-,04			67	-,19						
	4,0	60	,09			92	-,06			24	-,29						
	5,0	37	-,29			38	-,33			25	-,35						
	Total	334	,00			334	,00			332	,00			334	,00		
<b>Beha2</b>	1,0	83	,19	2.31	.05	17	,40	1.58	.17	68	,27	4.13	.00	154	-,03	.32	.57
	2,0	96	,08			92	-,12			148	-,03			180	,02		
	3,0	58	-,26			95	-,09			67	-,29						
	4,0	60	-,05			92	,11			24	-,21						
	5,0	37	-,15			38	,07			25	,35						
	Total	334	,00			334	,00			332	-,01			334	,00		
<b>Beha3</b>	1,0	83	-,014	2.72	.02	17	,40	4.18	.00	68	,04	3.24	.01	154	,06	1.13	.28
	2,0	96	,25			92	-,18			148	,16			180	-,05		
	3,0	58	-,07			95	-,02			67	-,13						
	4,0	60	-,15			92	,26			24	-,17						
	5,0	37	-,27			38	-,30			25	-,51						
	Total	334	,00			334	,00			332	,00			334	,00		

Figure 1: The sociodemographic indicators of travel insurance fraud: motivations, emotions, and behaviours - summary results



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