

Behavioural interventions for insurance

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Focus Note



What is behavioural science?

The scientific study of human
behaviour



What is a behavioural intervention?


Any interaction that has been
explicitly designed to influence
the financial decision (or
behaviour) of an existing or
potential customer



Insurance uptake across sub-Saharan Africa remains low. Low take-up rates are coupled with high policy origination costs and high policy lapse rates. This limits the value derived by the consumer, as the benefits of insurance products are often not realised. Insurers are increasingly looking for innovative ways to overcome these challenges. Insights from behavioural science can be used to inform the design and delivery of insurance products and increase uptake and retention of existing consumers.

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Two systematic reviews conducted in 2017 and 2018 identified 23 unique behavioural interventions for financial service providers. Across 42 countries, 311 behavioural scientists tested over 150 studies on the savings, credit, payment and insurance decisions of financial service customers.

	No. of studies	No. of Interventions	No. of authors	No. of countries
Financial services	150	23	311	42
Insurance	14	19	44	8

Fourteen studies by 44 authors tested 10 interventions on insurance uptake and usage, across eight countries.

Behavioural science interventions

Intervention areas	Interventions	Definitions	No. of insurance interventions*
1. Client choice architecture How product and service choices are presented to consumers	Opt-in/opt-out (defaults)	Pre-selected product options (e.g. savings contributions levels) that will prevail unless the consumer selects an alternative	2
	Prompted choice	Customers are prompted to make an active choice rather than being presented a default option	
	Choice set	Changes are made to the ordering, frequency or number of choices presented to new or existing consumers	
2. Commitment features Product features that commit an individual to a future act or decision	Commitment devices	Restricts or disincentivises a set of possible future choices	
	Implementation intention	Connects a future situation with a specific goal-directed behaviour, specifying in advance when/where and how the goal will be achieved	
	Labelling/earmarking	Labelling financial services or products for an intended purpose (education, holiday, etc.)	
	Goal-directed	Committing behaviour towards achieving a specific goal or the selection of a predefined goal	
	Social enforcement	Communicating the financial decision (or behaviour) of an individual to members of the individual's social network	
	Self-identification priming	The identity of the decision-maker is made salient to both the decision-maker and the financial service provider.	
3. Pricing and financial benefits Monetary and non-monetary incentives	Standard incentives	Monetary and non-monetary incentives to promote or discourage behaviour	4
	Discounting/coupons	Providing the product or feature at a discounted rate	
	Prize-linked	A lottery conferring a prize to a financial services account holder if they meet certain conditions	
	Certainty premium	A guarantee added to a product that reduces or eliminates future uncertainty for the customer	
4. Client communication Communication and marketing strategies	Messenger	Influence of source of information (credible or relatable messenger) on behaviour	2
	Reminders	Reminders (via mobile phone, post, SMS, in-person) to prompt and remind clients to act	1
	Affect	Eliciting emotional responses through words, images, or information	3
	Social norms	Making the customer aware of average behaviour, behavioural expectations or rules in a group or society	
	Anchoring	Presentation of an initial anchor or reference point to the customer	1
	Relative adjustment	Communicating a change related to a specific metric (e.g. progress towards a goal or a change in your credit score)	
	Virtual reality	Using technology to produce age-progressed renderings of their future selves	
	Signalling	Use of status, quality or in-group attributes (e.g. platinum cards or gold medical aid package)	1
	Fresh start - timing	Using temporal landmarks that represent new beginnings (e.g. new year/birthday) to promote future-oriented behaviour	
	Loss or gain framing	Phrasing an outcome in terms of negative loss or positive-gains features	2

* Some studies tested multiple interventions

Key findings

Choice set



Changes made to the ordering, frequency or number of choices presented to new or existing consumers.

1. Uptake of life insurance policies by Mexican microfinance consumers decreased by 30% when they were asked to pay insurance premiums in an upfront lump-sum amount, as opposed to paying in weekly instalments.¹
2. The number of cotton farmers in Burkina Faso buying weather index insurance increased by 15.5% when claim payments consisted of both a pay-out of the loss event and a rebate of the premiums paid to date. Farmers were willing to pay 10% more for the premium rebate policy than the traditional policy in which only a claims payment would be received if a loss were incurred.²

Discounting and coupons



Providing the product or product feature at a discounted rate or providing a coupon that entitles an individual to a discounted price.

1. Price discounts led to an increase in the take-up of weather index insurance among Indian farmers. A discount of 50% increased take-up by 12.9 percentage points.³
2. Removing the subsidy for a life insurance product resulted in a 13.5% reduction in the number of Mexican microfinance borrowers who repurchased insurance.⁴
3. German farmers were 50% more likely to purchase weather index insurance when it was communicated that the product was subsidised by €40 (22% of the total price) even though the premium cost to the farmers remained the same.⁵
4. Ethiopian farmers were 46% more likely to purchase index-based livestock insurance – when they received a discount coupon that reduced the cost of the premium – than those who did not receive a discount in the first sales period.⁶

- 1 Bauchet, J. and Morduch, J. 2018. Paying in Pieces: A natural experiment on consumer demand under different payment schemes. Purdue University and New York University, working paper.
- 2 Serfilippi, E., Carter, M. and Guirkingner, C. 2018. Insurance Contracts when >>>>Individuals “Greatly Value” Certainty: Results from a Field Experiment in Burkina Faso (No. w25026). National Bureau of Economic Research.
- 3 Ceballos, F. Butler, A. Manuel R, I. & Robles, M. 2015. Smallholder access to weather securities in India. Impact Evaluation Report: International Initiative for Impact Evaluation.
- 4 Bauchet, J. 2014. Price and Information Type in Life Microinsurance Demand: Experimental Evidence from Mexico. Purdue University.
- 5 Mußhoff, O., Hirschauer, N., Grüner, S. and Pielsticker, S. 2018. Bounded rationality and the adoption of weather index insurance: Evidence from an extra-laboratory experiment with farmers in Germany. Agricultural Finance Review. 78(1):116-134.
- 6 Takahashi, K., Barrett, C. B., Ikegami, M. & Sheahan, M. 2014. Quasi-experimental evidence on the drivers of index-based livestock insurance demand in Southern Ethiopia. Institute of Developing Economies Discussion Paper No. 480.

A cost or guarantee added to a product that reduces or eliminates future risk to the customer.

1. For every 1% increase in the likelihood that an insurer will not pay an insurance claim, the premium amount that German students were willing to pay for theft insurance decreased by 9%.⁷
2. More than five times as many homeowners in the United States purchased a hurricane insurance contract that had fixed premiums over two years than those who purchased an annual, one-year contract with fluctuating premiums. Even when the two-year contract was priced 10% above its actuarially fair rate, homeowners were 10.6 percentage points more likely to purchase the two-year contract than the one-year contract, which was priced at its actuarially fair rate.⁸

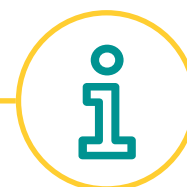
Certainty premium



Influence of source of information (credible or reliable messenger) on behaviour.

1. Indian farmers who were familiar with BASIX (a trusted microfinance institution with a close relationship to rural villages) increased their take-up of a rainfall insurance product by 10.1 percentage points when the product was endorsed by agents from BASIX than when it was not endorsed.⁹
2. Chinese rice farmers increased their take-up of weather insurance by 6.74 percentage points when information about the product was disseminated throughout their social network. This effect on uptake is equivalent to granting a 15% reduction in the cost of the premium.¹⁰

Messenger



Reminders (via mobile phone, post, SMS or in person) to prompt and remind clients to act.

1. UK motor vehicle insurance policyholders were 10.6 percentage points more likely to shop around for alternative motor insurance policies when they received reminders in the form of letters two weeks after they received their renewal notice for their current insurance policy.¹¹

Reminders



- 7 Zimmer, A., Gründl, H., Schade, C.D. and Glenzer, F. 2018. An Incentive-Compatible Experiment on Probabilistic Insurance and Implications for an Insurer's Solvency Level. *Journal of Risk and Insurance*, 85(1): 245-273.
- 8 Kunreuther, H. and Michel-Kerjan, E. 2015. Demand for fixed-price multi-year contracts: Experimental evidence from insurance decisions. *Journal of Risk and Uncertainty*, 51(2): 171-194.
- 9 Cole, S., Giné, X., Tobacman, J., Topalova, P., Townsend, R. M. & Vickery, J. 2013. Barriers to Household Risk Management: Evidence from India.
- 10 Cai, J., De Janvry, A. and Sadoulet, E. 2015. Social networks and the decision to insure. *American Economic Journal: Applied Economics*. 7(2): 81-108.
- 11 Adams, P., Baker, R., Hunt, S., Kelly, D. and Nava, A. 2015. Encouraging Consumers to Act at Renewal Evidence from Field Trials in the Home and Motor Insurance Markets. FCA Occasional Paper, (12).

Affect



Eliciting emotional responses through words, images or information.

1. Germans were more likely to purchase insurance or take-up higher levels of coverage for a bicycle when they were induced with joy by watching a happy movie clip.¹²
2. Germans were less likely to purchase insurance or take-up lower levels of insurance coverage for a bicycle when they were induced with sadness by watching a sad movie clip.¹³
3. Germans were more likely to purchase insurance or take-up higher levels of coverage for a bicycle when they were told that they have an emotional attachment to the bicycle. This indicates that emotions can affect consumers' insurance purchasing decisions.¹⁴

Anchoring



Presentation of an initial anchor or reference point to the customer.

1. Putting last year's premium on insurance renewal notices caused between 11% and 18% more British homeowners to switch contracts or to negotiate their home insurance policy compared to those who only received a standard letter that did not have this comparison.¹⁵

Signalling



Use of status, quality or in-group attributes (e.g. platinum cards or gold medical aid package).

1. Individuals in the United States preferred insurance contracts that were marketed as being gold plans (and thus seen to be premier) over silver or bronze plans, regardless of the cost and feature differences between the contracts.¹⁶

→ Same study.

12 Jaspersen, J.G. and Aseervatham, V., 2017. The influence of affect on heuristic thinking in insurance demand. *Journal of Risk and Insurance*. 84(1): 239-266.

13 Ibid.

14 Ibid.

15 Adams, P., Baker, R., Hunt, S., Kelly, D. and Nava, A. 2015. Encouraging Consumers to Act at Renewal Evidence from Field Trials in the Home and Motor Insurance Markets. FCA Occasional Paper, (12).

16 Ubel, P.A., Comerford, D.A. and Johnson, E. 2015. Healthcare.gov 3.0—Behavioral economics and insurance exchanges. *New England Journal of Medicine*. 372(8): pp.695-698.

Loss or gain framing



Phrasing an outcome in terms of negative loss or positive-gains features.

1. American students' demand for high-load insurance (the extended warranty of a TV they purchased) was not affected by variations in the framing of a contract, specifically where the contract emphasised the probability of loss, the expected loss faced by the insurer (portion of the premium set aside for losses) or the expected profit of the insurers (portion of the premium kept for profit). This indicates that disclosure is not effective in changing behaviour.¹⁷
2. Demand for rainfall insurance among rural Indian households was not affected by framing the insurance contract in either a positive way (e.g. pay-out happens 2 out of 10 times) or a negative way (e.g. pay-out does not happen 8 out of 10 times) way.¹⁸



17 Ragin, M.A. 2015. The Effect of Information on Demand for High-Load Insurance. Working Paper: World Risk and Insurance Economics Congress (WRIEC).

18 Cole, S., Giné, X., Tobacman, J., Topalova, P., Townsend, R. and Vickery, J. 2012. Barriers to household risk management: Evidence from India. American Economic Journal: Applied Economics, 5(1): 104-35.



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About FSD Africa

FSD Africa is a non-profit company which aims to increase prosperity, create jobs and reduce poverty by bringing about a transformation in financial markets in SSA and in the economies they serve. It provides know-how and capital to champions of change whose ideas, influence and actions will make finance more useful to African businesses and households. It is funded by UK Aid from the UK Government. Through access to finance initiatives, it seeks to build financial inclusion. Through capital market development, it looks to promote economic growth and increase investment. As a regional programme, it seeks to encourage collaboration, knowledge transfer and market-building activities – especially in fragile states. FSD Africa also provides support to the FSD Network. Where there are opportunities to drive financial market transformation more quickly and intensively through capital investment, FSD Africa will deploy equity, loans or guarantees as the situation requires.