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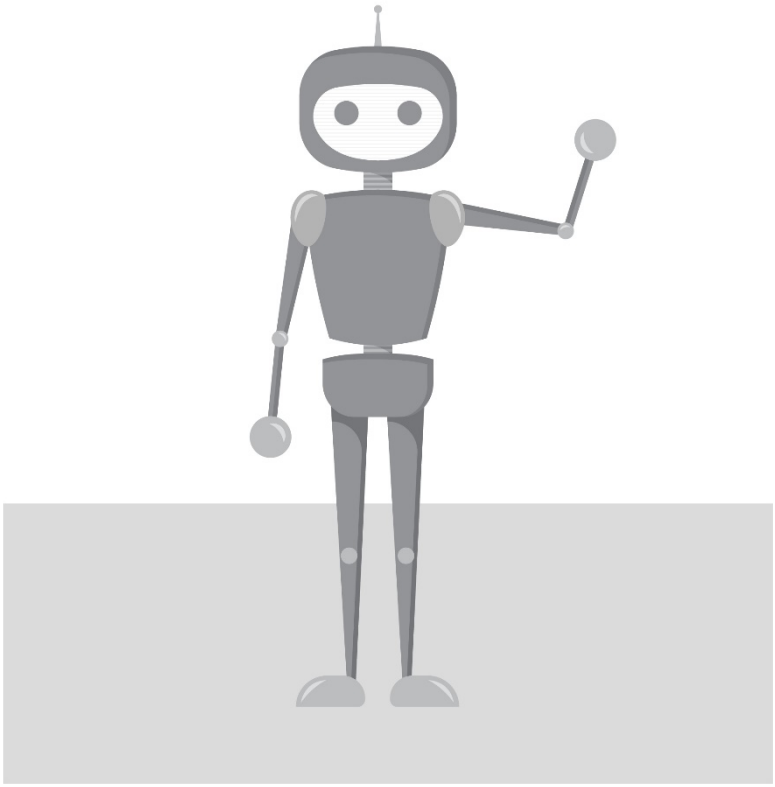
BETA



Slowing down to add it up: technical appendices

About these appendices

These technical appendices supplement the BETA report *Slowing down to add it up: using behavioural insights to support decision-making about add-on insurance.* BETA partnered with the Australian Securities and Investments Commission to design and test an information statement to support consumers to make decisions about add-on insurance. The key results of the evaluation are summarised in the main report. These appendices provide additional details about the sample, recruitment strategy, hypotheses, power-analyses, results, and the survey instrument.

Appendix 1: Technical Details 3
Appendix 2: Statistical Tables 9
Appendix 3: Full Study Text 23
References 36

Appendix 1: Technical Details

Pre-registration, pre-analysis plan, and ethics

This trial was publically pre-registered on the AEA, record number AEARCTR-0006236. The pre-registration plan was also documented on the BETA website. Both registrations took place before we analysed the data. All of our analyses were consistent with our pre-analysis plan. The pre-analysis plan is published on the BETA website as a supplement to the report.

The project was approved through BETA's ethics approval process, with risk assessed in accordance with the guidelines outlined in the National Statement on Ethical Conduct in Human Research.

Population and sampling

Our population of interest was Australian residents, all of whom were considered potential consumers of add-on insurance. We sought participants who were aged 18+ and below 65, and who did not work in the insurance industry. These were the only exclusion criteria.

Our sample was recruited by Dynata, who were also in charge of incentivising participants. Dynata describe their incentivisation process as follows: 'Panellists are rewarded for taking part in surveys according to a structured incentive scheme, with the incentive amount offered for a survey determined by the length and content of the survey, the type of data being collected, the nature of the task and sample characteristics. (…) All incentives are awarded only once the survey has been completed. The incentive options allow panellists to redeem from a large range of gift cards, points programs, charitable contributions, and partner products or services.' We recruited with interlocking quotas on age, gender, and location (by state), in order to have a broadly nationally representative sample on these dimensions. We administered the quotas in-house using the online Qualtrics survey platform.

Our target was a sample of 6,300 participants. We obtained 6,404 cases but after excluding cases with missing data on the primary outcome variable (i.e., decision to buy or not buy add-on insurance), as we had pre-registered, our final sample size was 6,243. It was close to nationally representative on our quota variables, but slightly low on young men: we were only able to recruit 344/393 young men from NSW (the largest discrepancy in absolute terms) and 5/15 young men from the NT (the largest discrepancy in relative terms). Our target was a total of 19.8% young men in the sample, and our final sample had 17.9%. Table 1 summarises the characteristics of the sample.

Table 1. Sample characteristics

Category		Number (per cent)
Gender	Women	3,183 (51.0%)
	Men	3,029 (48.5%)
Age	Younger (18-34 years)	2,372 (38.0%)
	Middle (35-49 years)	2,035 (32.6%)
	Older (50-64 years)	1,836 (29.4%)
Location	Australian Capital Territory	117 (1.9%)
	New South Wales	1,973 (31.6%)
	Northern Territory	49 (0.8%)
	Queensland	1,213 (19.4%)
	South Australia	443 (7.1%)
	Tasmania	135 (2.2%)
	Victoria	1,663 (26.6%)
	Western Australia	650 (10.4%)
Income	Low (under $6,000) or prefer not to say	1,066 (17.1%)
	Below median ($6,000-$44,999)	1,906 (30.5%)
	Median and above ($45,000 or more)	3,203 (51.3%)
Employment status	Full-time	2,745 (44.0%)
	Part-time	972 (15.6%)
	Self-employed	277 (4.4%)
	Casual	364 (5.8%)
	Home duties	415 (6.6%)
	Retired	326 (5.2%)
	Not employed	542 (8.7%)
Language spoken at home	English	5,374 (86.1%)
	Another language	783 (12.5%)
Aboriginal/Torres Strait Islander	Aboriginal	267 (4.3%)
	Torres Strait Islander	81 (1.3%)
	Both	63 (1.0%)
	Neither	5,723 (91.7%)
Disability	Yes	684 (11.0%)
	No	5,392 (86.4%)
Home ownership	Rent	2,455 (39.3%)
	Mortgage	1,950 (31.2%)

Category		Number (per cent)
	Own outright	1,578 (25.3%)
Education	University	2,762 (44.2%)
	Diploma/Certificate	2,048 (32.8%)
	No tertiary	1,415 (22.7%)
Could you access $2,000 now, if an unexpected expense came up?	Yes	4,666 (74.7%)
	No	1,528 (24.5%
In the last 12 months, did any of the following happen to you because of a shortage of money? (Respondents could select more than 1)	Could not pay electricity, gas, or telephone bills on time	622 (10.0%)
	Could not pay the mortgage or rent on time	563 (9.0%)
	Pawned or sold something	652 (10.5%)
	Went without meals	615 (9.9%)
	Was unable to heat home	452 (7.3%)
	Asked for financial help from friends or family	739 (11.9%)
	Asked for help from welfare/community organisations	371 (6.0%)
	None of these	4,136 (66.6%)

Note: Proportions do not all sum to 100% as not all individuals responded to all questions, and a small number of "other" and "prefer not to say" responses are excluded from this table.

Randomisation and balance checks

Using the Qualtrics survey platform we randomly allocated participants to one of the seven cells in the experiment (1 control, 6 intervention conditions – see Table 2). Participants initially had an equal probability of being assigned to each cell, but Qualtrics applied an adjustment (increasing the likelihood of assignment to the cell with the lowest sample size) to ensure the cell numbers don't become too uneven. Following this procedure, the sample size of each cell ranged from 882 to 907 participants. The characteristics of the sample in each cell are summarised in Table 2.

Participants were also randomised to complete one of three shopping scenarios – travel, phone, and loan – using the same procedure as above. This resulted in 2,087 the travel scenario, 2,098 completing the phone scenario, and 2,058 participants completing the loan scenario.

Table 2. Sample characteristics by treatment condition (CR = claims ratio)

Condition		Control	Blue			Red		
		-	No CR	Low CR	Mod CR	No CR	Low CR	Mod CR
	N	907	899	882	889	886	897	883
Gender	Men	432 (47.6%)	435 (48.4%)	443 (50.2%)	411 (46.2%)	448 (50.6%)	451 (50.3%)	417 (47.2%)
	Women	473 (52.1%)	460 (51.1%)	435 (49.3%)	473 (53.2%)	433 (48.9%)	440 (49.1%)	461 (52.2%)
Age	Younger	324 (35.7%)	349 (38.8%)	348 (39.5%)	360 (40.5%)	344 (38.8%)	334 (37.2%)	313 (35.4%)
	Middle	295 (32.5%)	286 (31.8%)	266 (30.2%)	299 (33.6%)	294 (33.2%)	300 (33.4%)	295 (33.4%)
	Older	288 (31.8%)	264 (29.3%)	268 (30.4%)	230 (25.9%)	248 (28.0%)	263 (29.3%)	275 (31.1%)
Location	VIC	254 (28.0%)	248 (27.6%)	254 (28.8%)	228 (25.6%)	217 (24.5%)	220 (24.5%)	242 (27.4%)
	NSW	285 (31.4%)	276 (30.7%)	285 (32.3%)	280 (31.5%)	280 (31.6%)	289 (32.2%)	278 (31.5%)
	QLD	166 (18.3%)	179 (19.9%)	165 (18.7%)	180 (20.2%)	179 (20.2%)	186 (20.7%)	158 (17.9%)
	Other	202 (22.3%)	196 (21.8%)	178 (20.2%)	201 (22.6%)	210 (23.7%)	202 (22.5%)	205 (23.2%)
Education	No tertiary	190 (21.0%)	211 (23.5%)	217 (24.7%)	206 (23.2%)	203 (23.0%)	200 (22.4%)	188 (21.3%)
	Dipl./Cert.	308 (34.1%)	292 (32.6%)	279 (31.7%)	297 (33.5%)	285 (32.3%)	317 (35.5%)	270 (30.6%)
	University	406 (44.9%)	394 (43.9%)	383 (43.6%)	384 (43.3%)	395 (44.7%)	377 (42.2%)	423 (48.0%)
Personal income	<$6,000/prefer not to say	153 (17.0%)	143 (16.1%)	163 (18.8%)	140 (15.9%)	146 (16.7%)	162 (18.2%)	159 (18.2%)
	Below median	281 (31.2%)	295 (33.2%)	248 (28.5%)	268 (30.5%)	281 (32.1%)	251 (28.3%)	282 (32.3%)
	Median or above	468 (51.9%)	451 (50.7%)	458 (52.7%)	472 (53.6%)	448 (51.2%)	475 (53.5%)	431 (49.4%)
Ability to access $2,000	No	227 (25.0%)	214 (23.8%)	211 (23.9%)	229 (25.8%)	211 (23.8%)	217 (24.2%)	219 (24.8%)
	Yes	672 (74.1%)	675 (75.1%)	665 (75.4%)	655 (73.7%)	667 (75.3%)	676 (75.4%)	656 (74.3%)
Faced shortages	Yes (did not select “none”)	311 (34.3%)	307 (34.1%)	278 (31.5%)	308 (34.6%)	313 (35.3%)	290 (32.3%)	280 (31.7%)
	None	594 (65.5%)	587 (65.3%)	601 (68.1%)	579 (65.1%)	571 (64.4%)	604 (67.3%)	600 (68.0%)

Note: Proportions do not all sum to 100% as not all individuals responded to all questions, and a small number of “other” and “prefer not to say” responses are excluded from this table.

Sample size and power calculations

With a planned sample of 6,300, this trial had power to detect a minimum effect size of 0.09 (Cohen's *h*) in our primary analysis comparing the intervention (any statement) and control conditions (no statement), assuming 80% power and alpha = .05. See pre-analysis plan for further details.

Outcome measures

Our primary outcome measure was *the decision to buy add-on insurance or not.* (Binary: 0 = no, 1 = yes)

Our secondary outcome measure was *the decision to 'opt-out' of follow up on the information statement.* (Binary: 0 = no, 1 = yes)

Hypotheses

In our pre-analysis plan, we specified three hypotheses in relation to our primary outcome, and two hypotheses in relation to our secondary outcome. These hypotheses related to the effect of an information statement (vs no information statement), and the effect of different design elements of the information statement (i.e., colour and claims ratio information). We report the results relevant to all these hypotheses in the main report, and the full regression outputs are in Tables 3-11 in Appendix 2: Statistical Tables.

H1: Any information statement will result in a smaller proportion of add-on insurance 'sales' than the control condition (no information statement).

H2: Red information statements will result in a smaller proportion of add-on insurance 'sales' than the blue information statements.

H3a: Information statements with a claims ratio (low and moderate pooled) will result in a different proportion of add-on insurance 'sales' than will information statements with no claims ratio.

H3b: A low claims ratio will result in a lower proportion of add-on insurance 'sales' than will information statements with a moderate claims ratio.

H4: Blue information statements will result in a smaller proportion of participants opting out than the red information statement.

H5a: Information statements with a claims ratio (low and moderate pooled) will result in a different proportion of people opting out than will information statements without a claims ratio.

H5b: Information statements with a moderate claims ratio will result in a smaller proportion of people opting out than information statements with a lower claims ratio.

Method of analysis

All data processing and analysis was performed using R (version 4.0.2, R Core Team, 2020) with the dplyr package (version 1.0.0; Wickham, François, Henry & Müller n.d.) in R Studio (RStudio Team, 2020). We performed randomisation checks after launch (n = ~170); and closer to completion (n = ~5000) we also checked quotas so that Dynata could adjust their

recruitment strategies. We did not analyse the outcome measures until after the data collection was completed.

As stated in our pre-analysis plan, all analyses used ordinary least squares regression with HC2 robust standard errors, using the 'estimatr' package from the DeclareDesign suite (Blair, Cooper, Coppock & Humphreys 2019).

For the primary outcome measure (first three hypotheses) we conducted three analyses. First, we compared the control condition to the intervention conditions (in aggregate), using a linear regression model with the intervention (vs control) as the single predictor. Second, we used a linear regression model to compare the different versions of the information statement, with colour (red vs blue) and claims ratio information (none vs any) as two dummy-coded predictors. We fitted this model to data from the subset of participants who saw an information statement (i.e., excluding the control group). We also fitted a model which included the interaction between colour and claims ratio and found no evidence of an interaction. Third, we compared the low and moderate claims ratios using a linear regression model with claims ratio (low vs moderate) as the single predictor. We fitted this model only to the subset that saw an information statement with a claims ratio. Full results are provided in Tables 3-11 in Appendix 2: Statistical Tables.

As per our pre-analysis plan, we did not adjust for multiple comparisons.

Use of p-values

There is a lively academic debate about the merits of testing for statistical significance, the appropriateness of conventional thresholds such as $p < 0.05$ (or any thresholds at all), and even the use of *p*-values generally. See, in particular, the 'The American Statistical Association Statement on Statistical Significance and P-Values' (Wasserstein and Lazar, 2016).

We have made use of *p*-values to aid the interpretation of our results. However, we also consider the *p*-value together with effect size, robustness checks and design limitations to assess the strength of a finding.

Appendix 2: Statistical Tables

The following statistical tables provide the full set of results underpinning the findings presented in the main body of the report. The tables are provided in approximately the same order as the questions were presented to participants in the study (with the exception that they had a choice to opt-out (our secondary outcome measure) *before* they decided whether to buy the insurance or not (our primary outcome measure)).

Effects of intervention on add-on insurance purchases (primary outcome)

Analyses of the primary outcome (add-on purchasing) are presented in Tables 3-7. Table 3 shows the effect of any information statement (averaged across all six intervention conditions) compared to no information statement. This analysis was pre-registered as our Model 1.

Table 3. Effect of information statement on purchases (N = 6,243)

Group	N	Purchasing rate (n)	Difference from control (95% CI)	*p*-value
Control (no statement)	907	37.8% (343)	NA	-
Intervention (any statement)	5,336	28.9% (1,540)	-9% (-12 to -6)	< 0.001

Table 4 shows the effect of colour (red versus blue) and the effect of claims ratio (any versus none). This analysis (including both effects) was pre-registered as our Model 2. We also pre-registered that we would run the same analysis again but including the interaction term (between colour and claims ratio) as well. The interaction term was not significant (effect estimate = 0.03, SE = 0.03, 95%CI: -0.02-0.08, p = .231).

Table 4. Effect of colour and claims ratio on insurance purchases (N = 5,336)

		N	Purchasing rate (n)	Difference (95% CI)	*p*-value
Colour	Red	2666	28.4%	NA	-
	Blue	2670	29.4%	1% (-1 to 3)	0.421
Claims ratio	None	1785	29.9%	NA	-
	Any	3551	28.3%	-2% (-4 to 1)	0.232

Table 5 shows the effect of low (vs moderate) claims ratio information. This analysis was pre-registered as our Model 3.

Table 5. Effect of claims ratio on purchases (N = 3,551)

	N	Purchasing rate (n)	Difference 95% CI	*p*-value
Low	1779	29.3%	NA	-
Moderate	1772	27.4%	-2% (-5 to 1)	.205

Table 6 shows the rate of add-on insurance purchases in each condition.

Table 6. Rate of purchases by treatment condition

Condition		N	Purchase rate
Blue	Low claims ratio	882	30.3%
	Moderate claims ratio	889	28.5%
	No claims ratio	899	29.4%
Red	Low claims ratio	897	28.3%
	Moderate claims ratio	883	26.3%
	No claims ratio	886	30.5%
Control	-	907	37.8%

Secondary analyses

We also conducted the analyses in Table 3 to 6 for each scenario separately. The rate of add-on insurance purchases in each scenario is included in Table 7 below, along with the results of comparing control to intervention in each scenario. We pre-registered that we would focus primarily on the aggregate result, but were interested in whether there were (qualitative) differences across the scenarios. Although the main effect was not significant in the consumer credit scenario, the pattern of results was similar in all cases (Table 7).

Table 7. Effect of information statement on purchases by scenario

Group	N	Purchase rate (n)	Difference from control (95% CI)	*p*-value
Travel scenario (n = 2,087)				
Control (no statement)	312	49.0%	NA	
Intervention (any statement)	1775	36.2%	-12.9% (-19% to -7%)	<0.001
Phone scenario (n = 2,098)				
Control (no statement)	301	32.9%	NA	
Intervention (any statement)	1797	23.3%	-9.6% (15% to -4%)	<0.001
Loan scenario (n = 2,058)				
Control (no statement)	294	31.0%	NA	
Intervention (any statement)	1764	27.2%	-3.7% (-9% to 2%)	0.190

Effects of intervention on opt-out rates (secondary outcome)

Rates of opt-out were fairly low overall, averaging across all conditions at 21.6%.

Table 8 shows the effect of colour (red versus blue) and the effect of claims ratio (any versus none) on rates of opt-out. We also ran the same analysis again including the interaction term between colour and claims ratio and did not find evidence of an interaction (effect estimate = 0.01, SE = 0.02, 95%CI: -0.04-0.06, p = .723).

Table 8. Effect of colour and claims ratio on opt-out rate (total N = 5,336)

		N	Opt-out rate (n)	Difference (95% CI)	*p*-value
Colour	Red	2666	20.4%	NA	-
	Blue	2670	22.7%	2.4% (0% to 5%)	0.037
Claims ratio	None	1785	24.4%	NA	-
	Any	3551	20.1%	-4.2% (-7% to -2%)	<0.001

Table 9 shows the effect of low (vs moderate) claims ratio information on opt-outs.

Table 9. Effect of claims ratio on opt-out rate (total N = 3,551)

	N	Opt-out rate (n)	Difference 95% CI	*p*-value
Low	1779	20.7%	NA	-
Moderate	1772	19.5%	-1.1% (-4% to 2%)	.412

Table 10 shows the rate of opt-outs in each condition.

Table 10. Opt-out rate by treatment condition

Condition		N	Opt-out rate
Blue	Low claims ratio	882	21.7%
	Moderate claims ratio	889	21.3%
	No claims ratio	899	25.3%
Red	Low claims ratio	897	19.7%
	Moderate claims ratio	883	17.95
	No claims ratio	886	23.5%

Note: those in the control condition did not see an information statement so were not given the opportunity to opt-out.

Secondary analyses

We also conducted these analyses for each scenario separately. The rate of opt-out in each scenario is included in Table 11 below, along with the impact of colour and claims ratio in each scenario. The effect of colour was only significant in the phone scenario, and the effect of the claims ratio was significant in the phone scenario and the loan scenario.

Table 11. Effect of colour and claims ratio on opt-out rates by scenario

Group	Estimate	SE	95% CI	*p*-value
Travel scenario (n = 1,775)				
Intercept	0.18	0.02	0.14 - 0.21	<.001
Colour (red = 0, blue = 1)	0.00	0.02	-0.03 - 0.04	.853
Claims ratio (none = 0, any = 1)	-0.02	0.02	-0.05 - 0.02	.363
Phone scenario (n = 1,797)				
Intercept	0.27	0.02	0.23 - 0.31	<.001
Colour (red = 0, blue = 1)	0.04	0.02	0.00 - 0.08	.045
Claims ratio (none = 0, any = 1)	-0.07	0.02	-0.12 - -0.03	.001
Loan scenario (n = 1,764)				
Intercept	0.25	0.02	0.21 - 0.29	<.001
Colour (red = 0, blue = 1)	0.03	0.02	-0.01 - 0.07	.169
Claims ratio (none = 0, any = 1)	-0.04	0.02	-0.09 - 0.00	.047

Exploratory Analyses

Reasons for buying/not buying add-on insurance

We asked participants to indicate why they decided to buy (or not buy) add-on insurance, from a list of reasons. Participants could choose more than one reason.

The most commonly selected reasons for *buying* insurance were that ‘The insurance provides peace of mind’, and that ‘The insurance is good value’ (Table 12). In the travel scenario, ‘I’m worried that COVID-19 will affect my travel plans’ was another very common response. This is consistent with previous research finding that people buy insurance for ‘peace of mind’ (Baker & Siegelman 2013).

Table 12. Reasons for buying insurance

	Per cent who selected each reason			
Reason	**Travel scenario (n = 795)**	**Phone scenario (n = 517)**	**Loan scenario (n = 571)**	**Overall (N = 1,883)**
I think I will need the insurance coverage	33.2%	34.6%	35.2%	34.2%
I always buy insurance for my phones / loans / flights	36.5%	31.9%	26.4%	32.2%
The insurance is cheap	25.0%	25.3%	24.7%	25.0%
The insurance is good value	44.8%	47.2%	44.5%	45.4%
The insurance is compulsory	12.2%	17.8%	17.9%	15.5%
The insurance provides peace of mind	56.7%	52.8%	52.7%	54.4%
The sales person / website recommended I buy the insurance	15.2%	23.4%	21.0%	19.2%
I can't be bothered shopping around	13.3%	13.3%	11.6%	12.8%
I'm worried that COVID-19 will affect my travel plans	48.2%	NA	NA	48.2%
Other (open ended)	0.3%	1.7%	1.6%	1.1%

Reasons for *not buying* insurance varied somewhat across scenarios (Table 13). 'I don't think I will need the insurance coverage' and 'The insurance is too expensive' were common responses, but in the phone scenario 'I never buy insurance for my phones' was the most common response, and in the travel scenario 'I will shop around for insurance coverage from a different provider' was the most common response.

Table 13. Reasons for not buying insurance

	Per cent who selected each reason			
Reason	**Travel scenario (n = 1,292)**	**Phone scenario (n = 1,581)**	**Loan scenario (n = 1,487)**	**Overall (N = 4,360)**
I don't think I will need the insurance coverage	23.5%	46.0%	47.6%	39.9%
I never buy insurance for my phones / loans / flights	18.6%	48.1%	25.6%	31.7%
The insurance is too expensive	27.9%	46.2%	37.4%	37.8%
The insurance is poor value	19.2%	30.6%	31.7%	27.6%
The insurance is not compulsory	26.1%	29.6%	32.4%	29.5%
The sales person / website was annoying	5.6%	10.0%	9.8%	8.6%
I will shop around for insurance coverage from a different provider	42.5%	12.7%	20.3%	24.2%
Other (open ended)	9.7%	7.0%	5.6%	7.3%

We investigated whether the intervention (seeing an information statement) increased the likelihood of selecting 'The insurance is not compulsory' and 'I will shop around for insurance coverage' as reasons for not buying add-on insurance. As can be seen in Table 14, these reasons were selected approximately 5 percentage points more often by participants who had seen an information statement than those who had not.

Table 14. Reasons for not buying insurance by control vs intervention

	Per cent who selected each reason	
Reason	**Control (n = 564)**	**Intervention (n = 3,796)**
I don't think I will need the insurance coverage	41.3%	39.6%
I never buy insurance for my phones / loans / flights	34.4%	31.3%
The insurance is too expensive	40.1%	37.4%
The insurance is poor value	25.2%	28.0%
The insurance is not compulsory	24.5%	30.3%
The sales person / website was annoying	3.5%	9.4%
I will shop around for insurance coverage from a different provider	18.6%	25.1%
Other (open ended)	7.4%	7.3%

Although this analysis was exploratory, it lends support to the possibility that the information statement was having its effect on purchasing by reminding people that the insurance was not compulsory, and prompting them to shop around.

Attention / heat maps

After the experimental part of the study was concluded, we asked participants to look at the information statement again, and to click on the areas that grabbed their attention first and second. These clicks were represented in the data in 2 ways: as a 1 (versus blank) within each pre-specified region of the information statement (see Figure 1 for regions), and as x and y coordinates of the two different clicks.

The heat maps included in the report were generated by mapping the x and y coordinates of the first click as 2D density plots, using the R packages tidyr (version 1.1.1; Wickham et al. 2019) and ggplot2 (version 3.3.2; Wickham 2016). A heat map can be thought of as a blurred scatterplot, where the colour corresponds to how closely the data points are clustered within a given area (more data points = 'hotter' area). For the 'any claims ratio' information sheets, the heat maps include the coordinates of the first click on both the low and the moderate claims ratio statements.

The number of clicks per pre-specified region (less granular version of the heat maps) for the top 5 regions of the information statement are included below in Table 15, split by colour and claims ratio, and Figure 1, overlaid on the information statement itself. Participants could not see the boundaries of the regions when they clicked on the statement.

Table 15. Number of clicks on the five most popular regions of the information statement

		By colour		By claims ratio		
Region	**Total**	**Blue**	**Red**	**No**	**Low**	**Mod**
Opt out	905	465	440	375	286	244
Not compulsory	848	451	397	366	247	235
Claims ratio coin	620	346	274	-	316	304
Claims ratio box	585	289	296	-	295	290
Crest	522	247	275	213	155	154

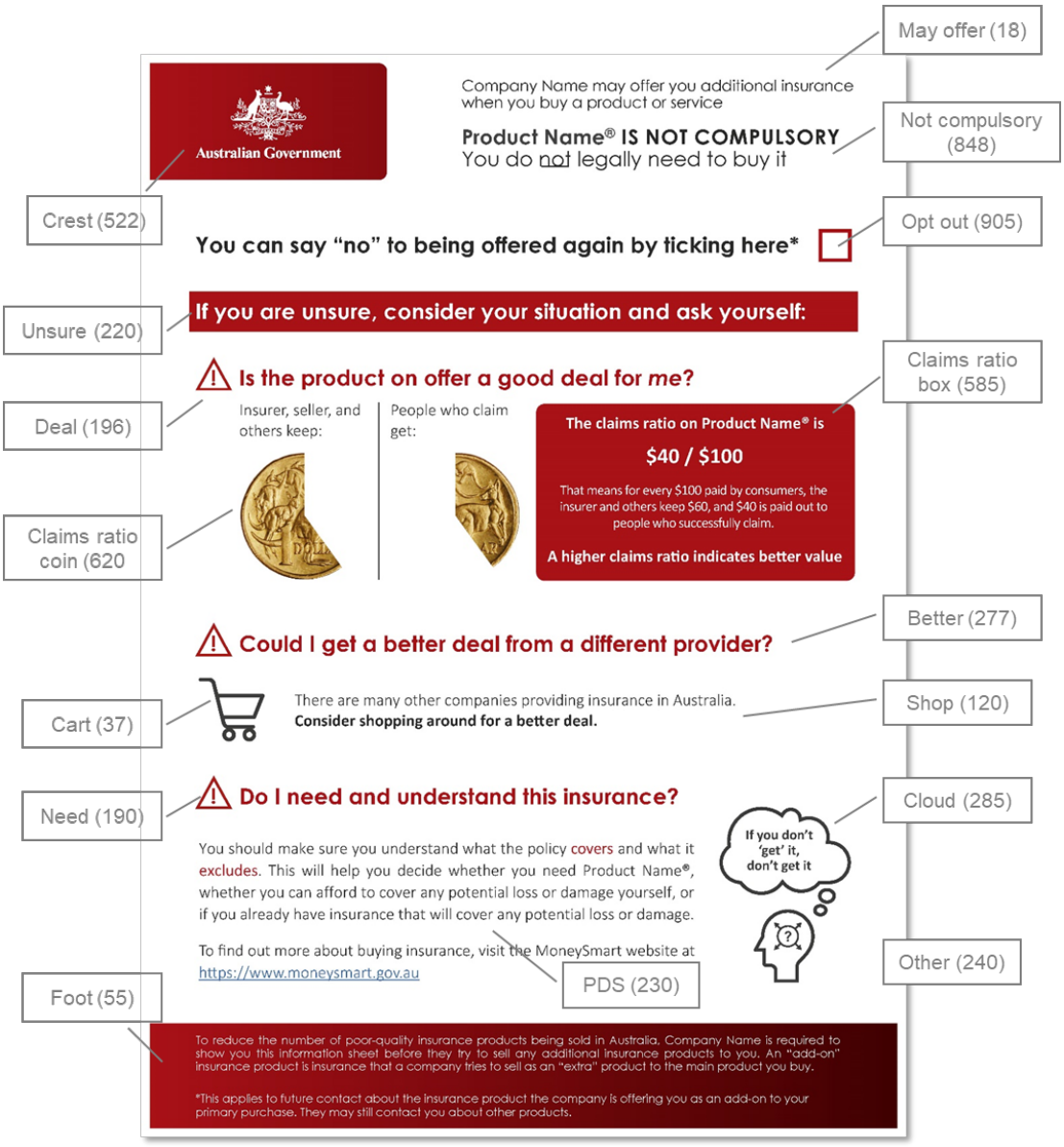


Figure 1: Number of clicks on each region of the information statement

Likes and dislikes

We also asked participants to indicate which parts of the information statement they liked and disliked. For this question, participants could click on as many regions of the statement as they wanted (total regions = 15 for CR statements, 13 for no-CR statements). Regions that they clicked on *once* turned a translucent green ('liked'), and regions that they clicked on *twice* turned translucent red ('disliked'). Participants could also unselect an area by clicking a *third* time. Regions that were not clicked on (or that were unselected) were coded as 'neutral', and did not have a colour.

For each participant, we calculated the number of regions that they liked. The modal response was to like and dislike 1 region each. However, a large proportion of the sample *disliked* 0 regions (54%).

For each region, we calculated the percentage of participants who liked and disliked those areas. These results are included in Table 16 below. The names of each region were the same as for the attention question (see Table 15).

Table 16. Per cent who liked and disliked each part of the information statement

Area	Like	Neutral	Dislike
Not compulsory	31.8	65.2	3.0
Opt out	30.7	64.3	5.0
Claims ratio box*	**28.0**	**55.3**	**16.8**
Claims ratio coin*	**22.8**	**64.8**	**12.4**
Cloud	18.3	72.3	9.5
Better	17.9	78.8	3.3
Need	14.1	81.7	4.2
PDS	13.9	81.0	5.1
Crest	13.7	83.3	2.9
Deal	13.4	84.0	2.6
Shop	12.3	84.3	3.5
Unsure	10.7	87.0	2.3
Foot	6.4	88.4	5.3
May offer	3.4	94.4	2.2
Cart	1.8	97.1	1.1

**Note: only for conditions with claims ratio, N = 3,551 (instead of N = 5,336 for the rest)*

The most liked regions were the opt-out and 'this insurance is not compulsory' regions. The claims ratio box and claims ratio coin were also well liked, but these were also the most *disliked* regions, as can be seen in Table 16.

We asked participant *what* they liked (or disliked) about the region they clicked on to 'like' (or 'dislike'). (If they liked/disliked more than one region, we first asked them to pick their most/least favourite, from the ones they had already selected.) Participants could select more than one response, from a list of six things they liked/disliked.

Deep-dive on likes and dislikes of the claims ratio regions

The top-liked regions ('it was not compulsory' and opt-out) were liked primarily because they were easy to understand, and useful in making a decision about buying insurance (see Table 17). This gives us further confidence these elements are effective additions to the information statement.

Table 17. Reasons for liking most preferred regions of the information statement

	'Not compulsory' (n = 1,070)	Opt-out (n = 766)
It was easy to understand	61.6%	58.1%
It was useful in making a decision about buying insurance	52.7%	42.3%
I liked the colour	9.3%	12.6%
I liked the design	15.4%	12.8%
It provided new information for me	17.7%	20.2%
Other reason (open ended)	5.5%	8.4%

Note: Participants could select more than one reason.

The least-liked regions (CR box and CR coin) were disliked primarily because they were hard to understand, and not useful in making a decision about buying insurance (see Table 18).

Table 18. Reasons for disliking least preferred regions of the information statement

	Claims ratio box (n = 494)	Claims ratio coin (n = 361)
It was hard to understand	28.4%	24.7%
It wasn't useful in making a decision about buying insurance	27.2%	31.1%
I didn't like the colour	7.9%	6.7%
I didn't like the design	12.2%	23.1%
It didn't provide new information for me	13.2%	18.3%
Other reason (open ended)	28.4%	26.4%

Note: Participants could select more than one reason.

However, a large proportion of those who disliked the CR box or CR coin said that they disliked them for an 'other reason'. Examining the open-ended responses of these people (only 40 people completed the question) revealed that this 'other' reason was primarily (~ 25 out of the 40) that the claims ratio indicated that the insurance product was low value for consumers.

> *I'm being ripped off; it's a rip off; seemed an unfair deal; it was obvious that it is a rip off; it showed a real unfairness; it shows how much companies rip people off*
>
> *Everyone is making money but not the customer*
>
> *I think I'm getting a bad deal; shows no value; it shows how poor the value of the insurance is*
>
> *I was annoyed reading how much profit these companies make; It reflects the insurer comes first*
>
> *The insured doesn't get too much back; poor coverage for the person that paid for insurance*

It's useful – makes me think how greedy insurance, seller, and other parties are

The rate itself put me off; the ratio of payment; payout ratio

These responses suggest that at least a small subset of the sample understood what ASIC intended the claims ratio to communicate to them (despite the null effect of the claims ratio overall). However, the subset of the sample that disliked the claims ratio sections were very unlikely to have bought the add-on insurance in the first place (14% compared to 29% for everyone who saw an information statement).

Further, examining the subset of the sample who *liked* the claims ratio regions (CR box and coin) paints a different picture. As can be seen in Table 19, these people say that they liked these regions because it was easy to understand, because it was useful in making a decision, and because it provided new information. (Half the people who picked the CR coin as their favourite also said they liked the design.) These people were substantially *more* likely to have bought the add-on insurance (38% compared to 29% average for everyone who saw an information statement).

Table 19. Reasons for liking the claims ratio

	Claims ratio box (n = 509)	Claims ratio coin (n = 492)
It was easy to understand	59.1%	59.8%
It was useful in making a decision about buying insurance	45.0%	32.5%
I liked the colour	22.2%	26.4%
I liked the design	25.2%	51.4%
It provided new information for me	45.4%	29.1%
Other reason (open ended)	8.4%	3.5%

Note: Participants could select more than one reason.

Comprehension of the claims ratio

We asked two multiple choice questions to assess comprehension of the claims ratio. These were:

1. Which of the following statements is TRUE about this product's claims ratio?
    a) For every $100 paid by consumers for this insurance, on average, $20 is paid out to people who successfully make an insurance claim
    b) If I pay $100 to the insurance company for this insurance, I will definitely get $20 back
    c) If I buy this insurance and make a claim on this insurance, I will get $20 back for every $100 that I paid in to the insurer
    d) If I buy this insurance and make a claim on this insurance, I will get $80 back for every $100 that I paid to the insurer

2. Which of the following indicates the *best claims ratio* from a consumer's perspective?
    a) $20/$100
    b) $40/$100
    c) $50/$100

As can be seen in Table 20, the proportion of the sample who answered these questions correctly was fairly low (43% got both questions right).

The cohort that got two questions right differed from the cohort that got two questions wrong on a number of dimensions, see Table 21.

Table 20. Comprehension of the claims ratio

	Select best claims ratio	
Select true statement about claims ratio	**Correct**	**Incorrect**
Correct	42.6%	13.3%
Incorrect	21.8%	18.8%

Note: Numbers do not add to 100% because some people did not respond to one or both of the questions.

Table 21. Comprehension of the claims ratio by sample characteristics

		Got both questions right (n = 2,658)	Got both questions wrong (n = 1,176)
Ability to access $2,000	No	18.4%	29.8%
	Yes	81.4%	68.7%
Faced shortages	Yes (did not select 'none')	23.6%	50.7%
	None	76.1%	49.1%
Bought add-on insurance	Yes	20.5%	47.4%
	No	79.5%	52.6%
Liked claims ratio	-	13.4%	19.9%
Disliked claims ratio	-	16.0%	8.6%
Education	No tertiary	21.4%	20.7%
	Diploma/Cert.	31.6%	34.0%
	University	46.9%	45.1%
Income	Low/prefer not to say	16.9%	14.3%
	Below median	30.5%	28.6%
	Median or above	51.7%	55.8%
Gender	Women	54.2%	39.8%
	Men	45.3%	59.6%

		Got both questions right (n = 2,658)	Got both questions wrong (n = 1,176)
Age	Younger	29.5%	49.9%
	Middle	31.9%	35.4%
	Older	38.7%	14.7%

Taken together, these results suggest that those who most need discouragement from buying add-on insurance may be the least likely to be helped by the claims ratio.

We also asked an open-ended question, asking people to explain the claims ratio in their own words. We have not analysed this data.

Recommended claims ratio

We asked participants to indicate what they thought would be a *good* claims ratio. Their responses are summarised in Table 22 below. Since the claims ratio was a new concept to participants, we were wondering whether responses might anchor on the claims ratio they had been shown in the experiment – that is, whether participants who had seen a low claims ratio (20%) would recommend a lower claims ratio than those who had seen a moderate claims ratio (40%). We did not find any evidence of anchoring. However, we did find that the people who understood the claims ratio (got both questions correct) recommended a higher claims ratio than those who did not understand the claims ratio (got both questions wrong).

Table 22. Recommended claims ratio (range: 1 to 99)

Group	Mean (SD)
By claims ratio exposure*	
Low (n = 3,112)	59.6 (21.4)
Moderate (n = 3,131)	61.1 (19.2)
By claims ratio comprehension	
Both right (n = 2,658)	66.6 (17.1)
One right (n = 2,191)	58.2 (20.9)
Both wrong (n = 1,176)	50.6 (21.0)
Overall	60.3 (20.3)

*Note: *All participants were shown a claims ratio again, prior to being asked this question, including those who in the control condition who had not previously seen one.*

Moneysmart and PDS

When participants first saw the information statement (during the hypothetical shopping scenario), we told them they could click/tap on any parts of the statement as they would in real life. In addition to the opt-out box, there were two other 'hyperlinks' on the page: a moneysmart link, and links to the Product Disclosure Statement. We recorded whether people clicked on these areas (and also showed them a mock-up moneysmart page, or a mock-up PDS, if they

clicked on those areas). Clicking rates were very low for both of these areas, but are summarized in Table 23.

Table 23. Per cent clicks on Moneysmart and PDS hyperlinks on the information statement

	Moneysmart	PDS
By colour		
Red	0.6%	0.5%
Blue	1.3%	0.7%
By claims ratio		
No claims ratio	1.2%	1.1%
Low claims ratio	1.1%	0.4%
Moderate claims ratio	1.0%	0.6%
Total	1.1% (n = 59)	0.7% (n = 38)

Appendix 3: Full Study Text

Please see project registry for information about where to access data dictionary.

Participant information sheet

Project title: Shopping Scenario Study

Who is doing the research and why?

This survey is part of a research project by the Behavioural Economics Team of the Australian Government (BETA) in the Department of the Prime Minister and Cabinet, and the Australian Securities and Investments Commission (ASIC). Your responses in this survey will be used to understand Australians' decisions about insurance. The information you provide will help us improve our advice to individual consumers.

How long will the study take?

This survey will take about 10-15 minutes to complete, and can be done either on your personal mobile device or computer.

Are there any risks to participating?

This survey has been reviewed by an ethics Committee of Peers and is considered "low risk". Participating in this study is very unlikely to have any negative consequences for you.

What will happen to my information?

The research team will have no access to personal information such as your name and email address. The de-identified data will be used for the purposes of this research and may be made available to academic researchers for further research and analysis. De-identified data may also be posted on a public data sharing website. Your responses will be grouped with the responses of other participants and analysed together. The findings from everyone's responses will be published in a public report. This report will only include general themes and findings. We won't talk specifically about you.

How will information and data from this research be stored?

During the project, the information and data will be stored on encrypted drives or computers that are protected by passwords and firewalls. The computers and hard drives will be in secure offices and hard drives will be stored in secure safes. Only researchers will be able to use or see your information.

What if I don't want to participate?

Your participation in the survey is voluntary, and you can stop at any time. If you stop (by closing the browser or navigating away), your responses will not be analysed and reported. There will be no negative consequences if you choose not to participate, or if you

stop participating once you've started. However, please note you will not be compensated for your time if you choose not to complete the survey.

If you consent to participate, please proceed with the survey by clicking ‘next’ below. This will start the survey.

Contact

If you have any further questions about this project, you can contact the BETA research team by emailing beta@pmc.gov.au.

Survey

Before we begin, please answer these quick questions so we can check your eligibility:

What is your gender?

1. Male
2. Female
3. Other [free text]
4. Prefer not to say

What is your age?

1. Under 18 [excluded]
2. 18-24
3. 25-30
4. …
   …
10. 60-64
11. 65 or older [excluded]

Which state do you live in?

1. VIC
2. TAS
3. WA
4. NSW
5. ACT
6. QLD
7. NT
8. SA

In which industry are you currently employed?

[20 industries from the ABS included; with “Insurance” as an exclusion criterion]

***

Please **do not use Internet Explorer** do complete this survey, if possible.

If you can, **please use an alternative internet browser** such as Google Chrome, Microsoft Edge, Safari, or Firefox.

[image of a row of browser logos appeared here, with a red X under Internet Explorer]

***

Thank you for your interest in our survey.

This study is about consumer behaviour. **To customise the survey**, we would like to know more about you and your preferences.

Which brand of **mobile phone** do you prefer?

1. Samsung
2. iPhone
3. Google
4. Other [free text]

COVID-19 has impacted our ability to travel, but some destinations might open up soon. If a travel "bubble" with New Zealand were to open up, **where would you most like to go**?

1. Auckland
2. Wellington
3. Christchurch

Imagine that you could **renovate the house** you're currently living in. Which area would you start with?

1. Kitchen
2. Bathroom
3. Living/dining
4. Deck/backyard/garden
5. Bedroom

Are you a night owl or an early bird?

1. Night owl
2. Early bird
3. Neither

***

Thank you for your answers!

Now you will be asked to respond to an imaginary shopping experience. **Try to answer the questions as you would in a real experience like this.** The scenario you see is based on your earlier answers. How you interact with the information will influence how the story unfolds.

[Participants were randomly assigned to see just 1 scenario: a travel scenario, a phone scenario, or a consumer credit scenario]

Imagine that you are interested in buying a [new mobile phone/flight to New Zealand/want to renovate your [previous choice of room].]

You go to a store called PhoneWarehouse and a salesperson, Sam, offers to show you some options.

or

You go to a bank called UVA Bank, and a salesperson, Sam, offers to show you some options.

or

You visit a website called FlightZone.

Sam is really knowledgeable about the phones/loans on offer, and quickly finds three options that fit your price range and preferences.

Please select your preferred [phone/flight/loan.]

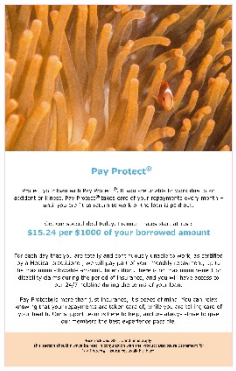
[Participants were given a choice out of three here]

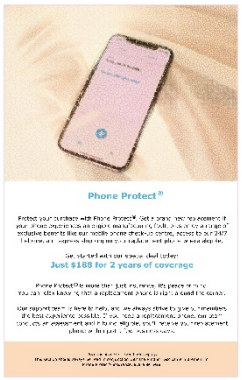
***

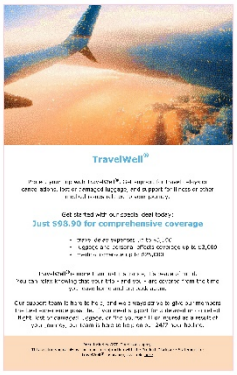
Great choice.

After thinking about it and looking over the [phone's/loan's/flight] features, you decide to buy the [phone/loan/flight.]

As you head to the checkout desk, **[Sam/FlightZone] suggests you look at some product insurance to protect your [new phone**/loan/flight]. [Sam/FlightZone] highly recommends getting the additional insurance, and shows you/displays a flyer about it.







[Participants were shown the flyer corresponding to their insurance, full size]

Please click next when you are ready to continue.

***

You tell Sam you'll think about the insurance.

When you get to the checkout desk to buy your [phone/flight/loan], **[Sam/FlightZone] mentions the [Phone Protect/Pay Protect/TravelWell] insurance again, and shows you another information sheet.**

You can click or tap on this information sheet as you would in real life, and it will influence what happens next.

> *[Participants were shown one of six versions of the information sheet. Participants in the control condition skipped this section.]*

Please tick the box below to indicate that you have read the information sheet. (If you would like more information about any part of the information sheet, please make sure you have clicked on it above.)

- ○ I've read the information sheet

> *[If participants clicked on the PDS section or moneysmart 'links', they were given appropriate information at this point. Then all participants were offered the insurance again.]*

***

Sam says: "So, would you like to buy Phone Protect insurance now? It'll provide some peace of mind for you!"

Or

Sam says: "I see you opted out of any follow-up about Phone Protect – once we finalize the sale I won't be able to follow-up with you about this insurance again. Would you like to buy it now? It'll provide some peace of mind for you!"

If you would like to have another look at the Phone Protect / Pay Protect / TravelWell advertising flyer, please click here.

What do you reply? [Primary outcome measure]

1. No thanks, I'm not interested in additional insurance.
2. Yes please, I'd to add [the insurance] to my purchase

***

You finalise the sale [with Sam/on the webpage], and you're all set!

Congratulations on your new imaginary phone/flight/loan, and have fun with it :)

***

In this hypothetical scenario, you bought a [phone/loan/flight].

Now we would like to ask you some questions about your decision. **There are no right or wrong answers, please just answer as honestly as you can.**

[If they decided to buy the additional insurance]

Why did you decide to buy the additional insurance? (Please select all options that apply to you.)

1. I think I will need the insurance coverage
2. I always buy insurance for my phone/loan/flight
3. The insurance is cheap
4. The insurance is good value
5. The insurance is compulsory
6. The insurance provides peace of mind
7. The salesperson/website recommended I buy the insurance
8. I can't be bothered shopping around
9. I'm worried that COVID-19 will affect my travel plans [only in travel scenario]
10. Other (please specify) [free text]

[If they decided to not buy the additional insurance]

Why did you decide not to buy the additional insurance? (Please select all options that apply to you.)

1. I don't think I will need the insurance coverage
2. I never buy insurance for phone/flights/loans
3. The insurance is too expensive

4. The insurance is poor value
5. The insurance is not compulsory
6. The salesperson/website was annoying
7. I will shop around for insurance coverage from a different provider
8. Other (please specify) [free text]

***

Now we'd like to ask you some questions about the information sheet you saw.

Please look again at the information sheet below, and **click or tap on the area that grabbed your attention first**.

Then click on the area that grabbed your attention **second.**

[Participants were shown the information sheet again, in a clickable format]

***

Now please click or tap on areas you particularly liked or disliked.

- To "**like**" – click once
- To "**dislike**" – click twice
- To **unselect** – click three times

Please select **at least one area** that you liked, and one area that you disliked.

[Participants could click on different pre-specified regions of the sheet. They could select more than one area that they liked or disliked.]

***

[If participants indicated that they liked more than one region, they were asked to pick their favourite.]

You indicated that you **liked** the following sections.

Now please pick your favourite!

[choice options determined by which areas they clicked on earlier]

***

[All participants were asked the following about their favourite region, or about the only region they liked.]

What did you like about this section? (You can select multiple options below.)

1. It was easy to understand

2. It was useful in making a decision about buying insurance
3. I liked the colour
4. I liked the design
5. It provided new information for me
6. Other reason [free text]

Did this part of the information sheet **influence your decision** to [buy/not buy] the add-on insurance in the scenario?

1. Yes, it influenced me a lot
2. Yes, it influenced me a bit
3. No, it did not influence me at all

***

[If participants indicated that they disliked more than one region, they were asked to pick their least favourite.]

You indicated that you **disliked** the following sections.

Now please pick your least preferred section.

[choice options determined by which areas they clicked on earlier]

***

[All participants were asked the following about their least favourite region, or about the only region they disliked.]

What didn't you like about it? (You can select multiple options below.)

1. It was hard to understand
2. It wasn't useful in making a decision about buying insurance
3. I didn't like the colour
4. I didn't like the design
5. It didn't provide new information for me
6. Other reason [free text]

Did this part of the information sheet **influence your decision** to buy/not buy the add-on insurance in the scenario?

1. Yes, it influenced me a lot
2. Yes, it influenced me a bit
3. No, it did not influence me at all

***

Now we would like to ask you some questions about a specific part of the information sheet you saw earlier. **There are no right or wrong answers, we are just interested in your opinion!**

> ***[or,** if participants were in the control condition or saw an information sheet without the claims ratio, we asked them the following:]*

Now we would like to ask you some more questions about insurance. **There are no right or wrong answers, we are just interested in your opinion!**

In the previous scenario, you were given a flyer about an insurance product and asked if you wanted to buy it.

One piece of information about insurance products that is not currently used regularly in Australia is the claims ratio.

An example of **how the claims ratio of a product might be explained** - for example, on an information sheet provided to consumers - is provided here:

> *[cut-out of the claims ratio region included here]*

[Participants who had already seen a claims ratio on the information sheet were asked:]

What was your first impression of this part of the information sheet?

1. I don't remember
2. I didn't notice it
3. It was confusing
4. It was surprising
5. It made the insurance look like a good deal
6. It made the insurance look like a bad deal
7. I liked it
8. Other [free text]

Did this part of the information sheet **influence your decision** to buy/not buy the add-on insurance in the scenario?

1. Yes, it influenced me a lot
2. Yes, it influenced me a bit
3. No, it did not influence me at all

[Those who had not seen a claims ratio originally were asked:]

Would this part of the information sheet **influence your decision** to buy (or not buy) an add-on insurance product?

1. Yes, it would influence me a lot

2. Yes, it would influence me a bit
3. No, it would not influence me at all

Please tell us in your own words what you think the “claims ratio” tells you. [free text]

Which of the following statements is TRUE about this product's claims ratio?

For every $100 paid by consumers for this insurance, on average, $20 is paid out to people who successfully make an insurance claim

1. If I pay $100 to the insurance company for this insurance, I will definitely get $20 back
2. If I buy this insurance and make a claim on this insurance, I will get $20 back for every $100 that I paid in to the insurer
3. If I buy this insurance and make a claim on this insurance, I will get $80 back for every $100 that I paid to the insurer

Which of the following indicates the **best claims ratio** from a consumer’s perspective?

[images of three claims ratios were displayed here: 20/100, 40/100 and 50/100]

Imagine that you are asked to suggest a good value claims ratio for an insurance product.

In the below text boxes, please set the claims ratio to a value (out of $100) that would make the product a good deal for you as a consumer.

Do this by suggesting how much insurers and others should keep, and how much consumers who claim should get, for every $100 consumers pay in premiums. (Remember, the values below have to add to 100).

1. Claims ratio: People who claim get: _____
2. Insurers, sellers, and others keep: _____

Total: [forced to add to 100]

***

Now we'd like to ask a few questions about your financial situation.

A reminder that your responses will be de-identified, meaning your responses about yourself will not be linked to your name, contact details, or other ways of identifying you.

In the last 12 months, did any of the following happen to you because of a shortage of money? Please select all that apply.

1. Could not pay electricity, gas or telephone bills on time
2. Could not pay the mortgage or rent on time
3. Pawned or sold something
4. Went without meals
5. Was unable to heat home
6. Asked for financial help from friends or family
7. Asked for help from welfare/ community organisations
8. None of these

Could you access $2,000 now, if an unexpected expense came up?

1. Yes
2. No

***

Thank you for your participation so far! You've almost completed the study.

This questions on this page help the researchers understand a bit more about the people behind all of the survey responses.

Remember, none of the responses you provide here will be linked to you or used to identify you in any way.

What is your personal annual income from all sources **before tax**? Please include all wages, salaries, pensions and other income. If you are unsure, your best guess will be fine.

1. Under $6000
2. $6000-$10,000
3. $10,000-$14,999
4. …
   …
19. $150,000 or over
20. Prefer not to say

Do you **rent or own** the home you live in?

1. I pay rent/board
2. I own the home outright and do not have a mortgage
3. I'm paying a mortgage on the home
4. Other (please specify) [free text]

Which of the following best describes the **highest level of education** that you personally have reached?

1. Primary school education
2. Some secondary school
3. Completed secondary school
4. Certificate
5. Diploma/Advanced diploma
6. Undergraduate degree
7. Postgraduate degree/qualification

Which of the following best describes your **current employment status**?

1. Working full time
2. Working part time
3. Working casually
4. Self-employed / Business owner
5. Not currently working / unemployed
6. Student
7. Retired
8. Home duties including caring for others
9. Unable to work due to illness, disability or impairment
10. Other (please specify) [free text]

Is English your **first language?**

1. Yes
2. Not, other (please specify) [free text]

Do you identify as **Aboriginal and/or Torres Strait Islander**?

1. Yes - Aboriginal
2. Yes – Torres Strait Islander
3. Yes – Aboriginal and Torres Strait Islander
4. No
5. Maybe

Do you identify as having **disability**?

1. Yes
2. No
3. Prefer not to say

What is the postcode where you usually live? (We ask for post code rather than city or state because it is a more helpful measure of both location and socioeconomic background.) [free text]

Please click next to submit the survey.

***

Thank you for completing this study!

If you have any further **thoughts about the survey** that you'd like to share with us, please write them in the box below. You can also contact the research team at beta@pmc.gov.au.

[free text]

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