QUESTIONNAIRE DESIGN

USING INCENTIVES WISELY AND AVOIDING SOCIAL DESIRABILITY BIAS

Academic and industry evidence have shown that excessive questionnaire length (i.e. more than 15 minutes) has a negative effect on data quality, as measured by data reliability, variance and validity (Galesic and Bosnjak, 2009; Marcus, Bonsnak, Linder, Pilischenko and Schütz, 2007).

These studies also present evidence that the completion rates for online questionnaires drops off significantly as the length of time taken to complete the questionnaire increases (i.e. the completion rate for a 10 minute survey was 67.5%, while a 30 minute survey had a completion rate of 18.6% (Marcus, Bonsnak, et al., 2007).

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RESEARCH

Aside from questionnaire length, other factors have an impact on response rates, completion rates and data quality. This paper will focus on; (1) the use of pre and post-paid incentive to improve online response and completion rates; (2) survey aesthetics and (3) the problems associated with the bias of our respondents when answering sensitive questions. This paper will also present some strategies to improve online response and completion rates and data quality.

We begin with a brief look at why consumers agree to participate in market research in the first place.

Just do it

Take a step back and ask yourself "why would someone give up 15 minutes of their day to answer 40 plus questions about their recent purchases?"

In a world where people are more likely to tell you how busy they are, rather than mention the weather, it seems unlikely that any consumer would want to tell a stranger about their recent consumer experience, express an opinion or offer a suggestion. This is especially true, when the respondent may not be able to see or speak to the market researcher.

Yet, lucky for us, many consumers do!

Han, Albaum, Wiley and Thirkell (2009) presented four theoretical perspectives as to why people agree to participate in market research.

These theories include:

- commitment / involvement;
- social exchange theory;
- cognitive dissonance; and
- self-perception.

Of these four theories, commitment / involvement and social exchange theory dominant the theoretical landscape concerning consumer market research participation.

Committed to the cause

The theory of commitment / involvement has been used by sociologists to explain consistent or repetitive behaviour amongst members of a group (Albaum, Evangelista and Medina, 1996; Han, Albaum et al., 2009). Hornback (1971) classified the commitment of an individual to a behaviour as "an allegiance" (p. 65) to a group that they perceive themselves to be a part of.

From a market research perspective, commitment / involvement can explain why consumers elect to be a member of an online market research panel. Consumers can be committed to many aspects of the market research process, including the research sponsor, the topic / research area or the rewards offered (Albaum, Evangelista et al., 1996).

In a way, the members of the online panel may feel that they are part of a wider community. Within this community, they are able to share their thoughts and opinions. This feeling of belonging facilitates the respondent's behaviour or commitment to participate in market research. This commitment to the marketing research process is further reinforced by offering incentives to the panelists (e.g. credit points, online vouchers etc.).

For market research, the panelist provides a convenient source of data. Panel providers can offer a reliable estimate of response rates, sample characteristics and time frames. This reliability often makes the panelist the first choice for marketing research professionals. Coupled with their commitment to participating in market research, panels are seen to be a safe option to get a research project done on time and on budget.

Nothing is for nothing

But what about consumers who are not part of some online panel community? What about the everyday individuals who are not really that interested in participating in online research? Why would they consider completing a survey?

Social exchange theory has provided an answer and some useful ideas on how to maximise response and completion rates.

Social exchange theory was first used in mainstream marketing literature in the influential book "Influence: The Psychology of Persuasion" by Prof. Robert Cialdini in 1984. He suggests that an individual's participation in an event or exchange is determined by their value assessment based on cost-benefit analysis (Cialdini, 1984; Monge and Contractor, 2003; Han, Albaum et al., 2009). This cost-benefit analysis could include anything from the purchase of shoes ["do I really need these, or is the $200 better spent elsewhere?"] or deciding to have the Tuscan Chocolate and Hazelnut tart or the Crêpe Suzette after dinner ["chocolate or orange?"].

Using the example of market research participation, a consumer is likely to participate when they perceive the rewards associated with participating in a survey to outweigh the costs and effort (i.e. giving 15 minutes). A framework to maximise response and completion rates is shown in Figure 1.

Increasing rewards is often interpreted as "give them [the respondent] a gift card" or "let's make them [the respondent] complete a game of skill". Many academic articles and industry studies have shown that the use of pre-paid incentives (i.e. the promise of a voucher, payment for completion or a gift such as a calendar, luggage tag etc.) can improve response and completion rates in non-panel studies, while post-paid incentives (i.e. providing the opportunity to enter a game of skill) does not have the same effect (Cobanoglu and Cobanoglu, 2003; Görtiz, 2006; Heerwegh, 2006; Sanchez-Fernández, Munoz-Leiva, Montoro-Rios and Ibanez-Zapata, 2008).

Göritz (2006) found that the value of the incentive does not improve response or completion rates in a linear way. Offering $20 does not provide any improvement in response or completion rates than if you offered $5. Finally, the monetary value of the incentives or the split-up of lotteries (i.e. several smaller prizes rather than one large prize) does not significantly affect the response rates in online surveys (Bosnjak and Tuten, 2003; Porter and Whitcomb, 2003).

Cobanoglu and Cobanoglu (2003) suggest that offering respondents a promised non-monetary incentive of small value (i.e. gift card, calendar, luggage tag etc.) as well as entering them into the draw to win a larger prize, will improve the response and completion rates of non-panel studies.

Overall, social exchange theory is more in line with the use of pre-paid incentives than the use of post-paid incentives (Cialdini, 2006; Sanchez-Fernandex, Munoz-Leiva et al., 2008). Once a potential respondent is made aware of a reward at the start of the survey, they will implicitly weigh up the benefits of that reward and the cost or effort associated with receiving it. The result of this mental calculation will determine if they will proceed or say "no thanks".

Trust us

So the consumer has said "yes". They've clicked on the link and the introduction page lights up their screen. At this point, all is fine. However what happens in the minutes to follow has more of an impact on response rates and data quality than the promise of the metaphorical "pot of gold" at the end of the survey rainbow!

One of the first things a respondent may think of is how their opinions, suggestions and details will be used in the future. Concern about privacy and identity theft has increased since the dramatic lapses in online security by large companies and websites which have made the news in the last few years (i.e. VISA, Vodafone, Valve Corporation, Facebook and Sony). As Figure 1 depicts, increasing the level of trust can maximise response and completion rates. Clearly showing who the research sponsor is (i.e. placing their logo on the screen throughout the survey) is one way to increase trust.

Other ways to increase trust is to:

- ensure that the respondent's personal details will be treated with the highest level of security possible;
- provide assurances that their personal details will not be passed onto any additional research agencies or used for future sales approaches; and
- if the topic of study is particularly sensitive (i.e. financial products or medical procedures) then it is recommended that respondents are guaranteed that their responses cannot be traced back to themselves, a process known as de-identification.

On the whole, the Australian market research industry is well regulated and these steps are followed in the vast majority of online research projects. The trick is not to get complacent.

The final "trust" issue is related to the promise of gifts. Studies show that respondents who have been offered an incentive and still do not accept mention that they do not believe that the incentives would be delivered and that it may be a trap (Han, Albaum et al., 2009).

This assurance remains a challenge for the industry, but it has been suggested that the use of pre-paid incentives could reduce this level of mistrust as respondents are guaranteed something, rather than the gamble of entering in a draw. Chances are that the respondent will not win, but they will never know for sure that their entry was actually part of the prize draw.
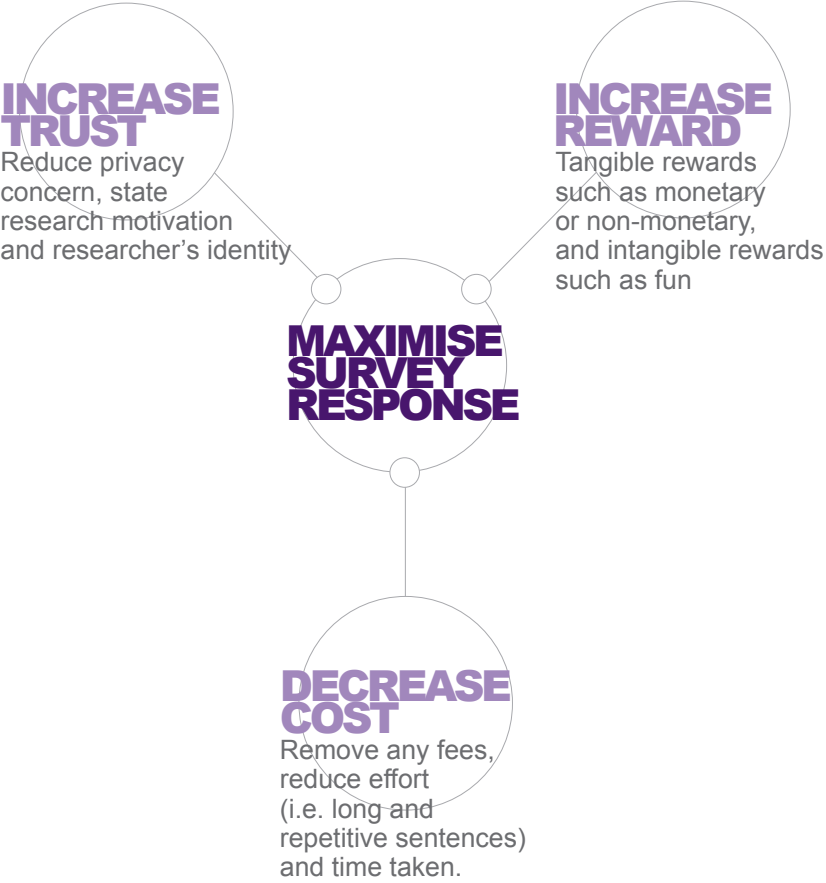

INCREASE TRUST
Reduce privacy concern, state research motivation and researcher's identity

INCREASE REWARD
Tangible rewards such as monetary or non-monetary, and intangible rewards such as fun

MAXIMISE SURVEY RESPONSE

DECREASE COST
Remove any fees, reduce effort (i.e. long and repetitive sentences) and time taken.

Figure 1
Maximise Survey Response

Is it worth it?

The time taken to complete a survey is often seen as being the main cost or effort involved in participating in market research. Most people are happy to give five minutes to offer their opinions or describe their experiences, but it would be foolish to suggest that the same person would be just as willing to give up 20 minutes, or answer long, repetitive and complex questions.

Questionnaire structure, presentation, download speed between pages and the use of long worded, repetitive sentences are seen to be another source of cost or effort (Fan and Yan, 2010; Galesic and Bosnjak, 2009; Han, Albaum et al., 2009). Frustration about the slow download speed, server crashes and failure to load web pages are extra problems experienced by online survey respondents. This type of cost is hardly avoidable, but researchers must try to avoid such problems by working with their field partners to ensure link quality and stability (Han, Albaum et al., 2009).

The use of repetitive questions and displaying line after line of text and radio buttons will bore a respondent. Respondent boredom will lead to an increased likelihood of premature drop out, speeding through the survey, incorrectly reading the instructions or "extreme" responses (i.e. more answers at the extreme ends of the scales leading to skews in the data).

Since the market research industry is using the internet as a tool to "speak" to their respondents, the opportunity exists to make the survey more "fun".

Let's not forget that there is an opportunity cost to respondents who participate in online research. These costs centre on the fact that we are taking our respondents away from thousands of other fun sites while they are filling out our surveys. This may influence their willingness to participate, especially considering that respondents may have to pay for their internet connection out of their own pocket and have small download limits (Han, Albaum et al., 2009).

A number of strategies can be used to make the survey more "fun" and reduce boredom. These include using impressive visual design and technical features (i.e. FLASH based graphics), instant feedback in charts or graphs, a clock showing the percentage of completion, background music and humour. However, before you consider including clips of "sneezing pandas " in your next online survey, the pursuit of "fun" is a double-edged sword. An overly "fun" survey may encourage ineligible respondents to participate, potentially invalidating the results of the study.

WHAT TO DO?

The preceding discussion has looked at a number of aspects of market research that have been shown to influence response and completion rates amongst the consumer population. In combination with the issue of excessive questionnaire length, and given the subject of this discussion, below is a suggestion of what can be done to improve response and completion rates:

- keep it simple;

- keep it short;

- make it fun; and

- give the respondent something they want!

Is seeing, believing? Social Desirability Bias

The next section of this paper will look at the impact of social desirability bias when respondents participate in self-reporting market studies.

Social desirability bias occurs when individuals describe or rate themselves in a manner that is untruthful or in a way that they feel may be viewed favourably by others (Steenkamp, de Jong and Baumgartner, 2009). These biased responses are based on cultural norms and the desirability of certain values, personality traits, attitudes, interests, opinions and behaviours (Steenkamp, de Jong et al., 2009). There is a tendency for respondents to provide answers to certain questions based on their expectations of what their culture would deem acceptable. This may result in an overly positive or negative bias, so these individuals can be judged in a favourable way by others (Tourangeau and Yan, 2007).

Research has shown that social desirability bias occurs in studies that include a high percentage of sensitive questions (Kreuter, Presser and Tourangeau, 2008).

Studies have shown that there is a significant difference between what men and women deem sensitive (Kreuter, Presser et al., 2008).

Men perceive questions that reflect influence or control to be highly sensitive (Steenkamp, de Jong et al., 2009). As a result, men usually over report or inflate responses to questions that centre on influence or control compared to women (Lalwani, Shavitt and Johnson, 2006).

In contrast, women perceive questions that reflect nurturing or approval to be highly sensitive (Steenkamp, de Jong et al, 2009). Therefore, women tend to over report or inflate their response to questions that reflect these attributes compared to men (Lalwani, Shavitt et al., 2006).

Other areas that are sensitive to social desirability bias include:

- personal income and earnings (often inflated when low and deflated when high);
- feelings of low self-worth (often denied) compliance with medicinal dosing (often inflated);
- intellectual achievements (often inflated);
- illegal acts (often denied); and
- indicators of charity or "benevolence (often inflated) (Kreuter, Presser et al., 2008).

Social desirability bias compromises data quality and validity (Steenkamp, de Jong et al., 2009). Data quality may be affected by a larger than normal amount of missing data as a result of "don't knows", "can't recall" or "I prefer not to answer. Respondents may choose not to provide any information or even exit the survey early as they find it difficult to respond to questions that requires them to depart from their own beliefs or morals (i.e. what should they say versus what is reality).

Aside from missing data, another consequence of social desirability bias is that it may cause skews in the distribution of responses along a scale or codeframe. These skews are the consequence of a higher than normal proportion of "extreme" answers to sensitive questions (see Figure 2).

Figure 2 illustrates that there may be a bias towards the affirmative as this response may be seen as acceptable in many western democratic societies or culturally normal. What is interesting is that skews in distribution for sensitive questions can still appear in data that is de-identified and cannot be traced back to an individual respondent (Steenkamp, de Jong et al., 2009)

HOW DO WE AVOID IT?

How can social desirability bias be reduced in market research?

Research shows that respondents are less likely to falsify their responses in a socially desirable way when completing a survey online (Kreuter, Presser et al., 2008). This is due to the anonymity of doing the survey online, without having to talk to a "real" person on the phone or face to face.

Please indicate how much you agree or disagree with the following statement; **"It is important that you always obey the law, even if it is unlikely that you'll get caught"**
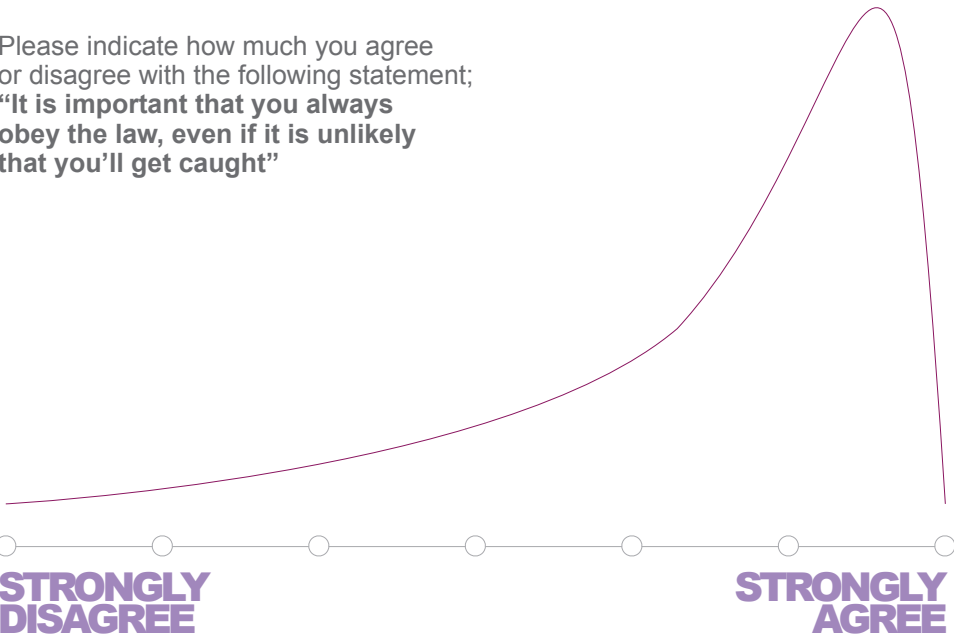

STRONGLY DISAGREE

STRONGLY AGREE

Figure 2
Hypothetical scale data distribution for sensitive questions

In Summary

As market research professionals, it is sometimes tough to resist the urge to "put it all in and we'll see".

Often we are faced with pressure from our clients and superiors to get the most out of each research project. However, as professionals we need to be mindful of the impact of low quality data that can result from bored and frustrated respondents, as well as those who are sensitive to the questions being asked.

As an industry, we need to be mindful of the additional field costs associated with low response and completion rates from offering rewards that are perceived to be inadequate or not worth the effort to respondents.

This paper presented some of the theories explaining why consumers agree to participate in market research. This paper also highlighted some of the mistakes the industry has made in the past. These mistakes have led to a consumer population ripened with mistrust for the industry, with a level of contempt for what we are attempting to achieve for our clients.

Strategies have been outlined, through this paper, on how to maintain good data quality and ensure that our respondents are kept happy.

- The use of meaningful per and post-paid incentives has been shown to improve click throughs and completion rates.

- Emphasising your firms commitment to data security and privacy standards, establishes trust and reduces the anxiety that may be associated with participating in market research.

These are useful ways to improve data quality, response and completion rates.

Finally, as an industry, we need to remember that every second the respondent is online doing our surveys, they could be online elsewhere. We must not abuse that privilege by getting them to do boring, long, difficult and nonsense surveys with little or no reward.

Remember...keep it simple, keep it short, make it fun and give the respondent something they want!

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