

QUESTIONNAIRE DESIGN

AND IMPLICATIONS ON DATA QUALITY AND RESPONDENT DROP OUTS

To say that consumer's online behaviour has transformed dramatically over the last ten years would be an understatement. From the simple and innocent ICQ chat rooms and MSN messenger, to the rise of Facebook, Twitter and youtube.com, the online community's interaction with online content has shifted from basic information search and communications to one where you could run your entire life, complete tasks and pay bills without having to leave the comfort of your bed.

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 **RESEARCH**

Unfortunately, this transformation has gone relatively unnoticed by the wider global market research industry (de Jong, 2010). Despite the creation of artificial communities, dredging through consumer blogs and monitoring “tweets”, the industry is still trying to engage respondents with methods and techniques that have remained unchanged for the past ten years. The industry has an opportunity to innovate to win respondent attention.

The battle for the click

Half the battle is getting a respondent to click on the link and agreeing to participate in the study. Again, the industry has been dragging its feet behind the rest of the world. Studies show that most respondents are happy to give up a few minutes to do something that they feel is contributing to the benefit of their favourite brand or a product / service (de Jong, 2010). Some even find it fun! However, at some point in the past, researchers thought it prudent to offer meaningless incentives to encourage respondents to have a “bad” experience, rather than improving the experience itself.

Evidence from both academic and industry research indicates that pre-paid incentives can boost response rates but post-paid incentives do not (Porter, 2004). In line with the findings for pen and paper surveys, post-paid incentives in online surveys such as lotteries do not significantly help response rates (Goritz, 2006; Porter and Whitcomb, 2003). Furthermore, Bosnjak and Tuten (2003) found that pre-paid incentives did not yield significantly higher response rates than post-paid incentives among members in a professional association or client sample.

Finally, the amount of incentive does not improve response rate in a linear way (Goritz, 2006). The amount of incentives and the split-up of lotteries (one large prize or several smaller prizes), do not significantly affect the response rates in both mail and web surveys (Bosnjak and Tuten, 2003; Porter and Whitcomb, 2003).

By offering meaningless incentives, the respondent’s behaviour has moved towards one of acquiescence, fraud and disengagement, which as an industry, we are trying to avoid. Rather than provide these types of incentives, our efforts are better placed in designing meaningful and more intelligent rewards-based incentives, such as services or useful information, as well as designing surveys that are more engaging, fun and of reasonable in length. A direct result of this would be lower dropout rates, higher completion rates and better quality data (de Jong, 2010; Goritz, 2006).

Consequences of long questionnaires

There are hundreds of academic articles and industry studies that have provided a plethora of recommendations to increase respondent engagement, completion rates and improve data quality. These recommendations range from improving aesthetics, interaction and the use of new media throughout the link. However the single most recommended method to increase respondent engagement, completion rates and data quality is to reduce the length of the survey (de Jong, 2010; Fan and Yan, 2010; Galesic and Bosnjak, 2009; Yan, Conrad, Tourangeau, and Couper, 2010).

Research has pointed to the fact that within a 20 minute or longer survey, the quality of the data from the early questions is significantly different from the data from later questions (Cape, 2010; de Jong, 2010). Studies show that measures of data quality, such as reliability, variance and validity, decrease dramatically as a survey gets longer and more repetitive (Galesic and Bosnjak, 2009). In addition, longer surveys tend to produce less independent and reliable factors within the datasets.

Aside from the impact on data quality, often just getting the respondent to complete the survey is a challenge. Galesic and Bosnjak (2009) studied the effect of stated survey length and differences in completion rates (see Figure 1). Over 3,400 respondents were equally divided into one of three groups. One group was told that the survey would take 10 minutes, another group was told the survey would take 20 minutes, whilst the last group would be given the 30 minutes survey. All respondents received the same questions. After they had completed the screening questions and five random blocks, respondents from the 10-minute group received a message announcing that the main part of the survey was over and that they could discontinue their participation. The respondents in the 20-minute group received the same message after they had completed the screening questions and 12 random blocks, whilst the last group completed the entire 20 block survey.

Galesic and Bosnjak (2009) found that of the respondents in Group A (10 minute survey), 75% of respondents chose to start the survey, while only 64.9% and 62.4% for Group B and Group C respectively elected to begin the survey. As expected, completion rates were significantly higher for Group A (68.2%) than Group B (56.8%) and Group C (46.8%). Of those who started, more respondents stayed until the end of the assigned questionnaire when it lasted approximately 10 minutes than when it took 30 minutes to complete. This suggests that even the respondents who were motivated enough to start the longer questionnaire eventually “lost their breath” and exited the survey earlier.

Other experimental studies have found significant negative effects of questionnaire length on response rates and completion rates for online surveys. Marcus, Bonsnak, Linder, Pilischenko and Schütz (2007) reported that the response rates for online questionnaires dropped off significantly as the length of time taken to complete the questionnaire increased. Marcus, Bonsnak *et al.*, (2007) found higher response rates when the stated length of the questionnaire was shorter (i.e. response rate for an 8 - 10 minute survey was 67.5%, 10-20 minute survey was 30.3% and a 30 minute survey was 18.6% [See Figure 2]).

Deutskens, Ruyter, *et al.*, (2004) did not announce the length of their questionnaire in advance, but the respondents were able to infer its likely length from the progress bar. They found higher completion rates when the questionnaire length was 15-30 minutes (24.5%) compared to 30-45 minutes (17.1% response rate).

Other researchers also examined effects of questionnaire length on data quality and found that the longer version had more “don’t know” answers, as well as more dropouts than the shorter version. Variance in response and other measures of data quality were better in the shorter surveys than in the longer ones (Galesic and Bosnjak, 2009).

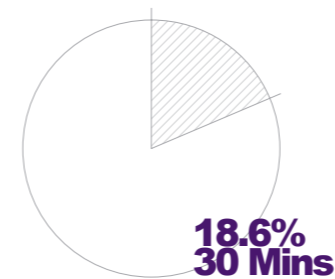
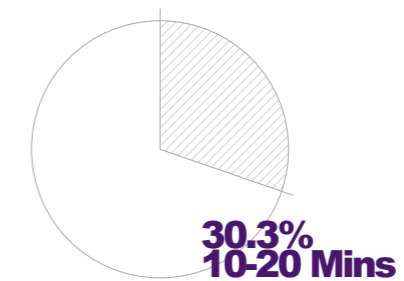
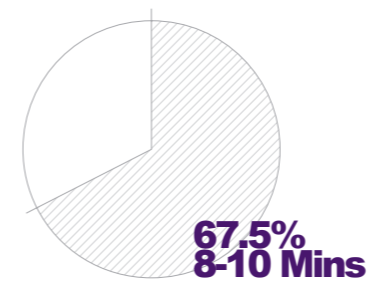
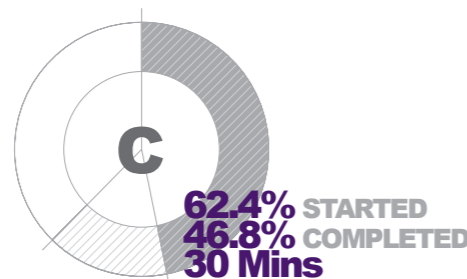
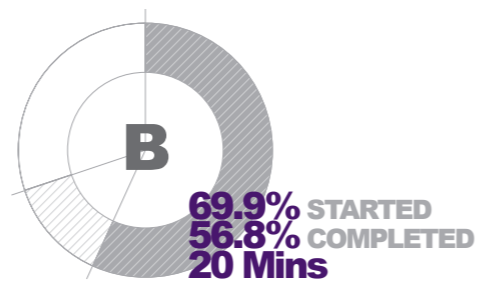
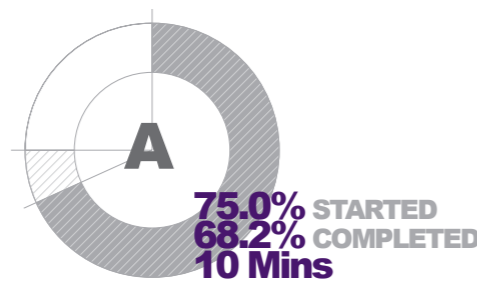


Figure 1
Survey Duration vs. Survey Completion Study (Galesic and Bosnjak, 2009).

Figure 2
Survey Participation Rates (Marcus, Bonsnak *et al.*, 2007)

WHAT TO DO?

The offering of meaningful and intelligent reward-based incentives can help to motivate respondents to participate in a study and reduce dropout rates.

However, such meaningful and intelligent rewards-based incentives cannot promise good quality data if the questionnaire is too long.

Regardless of what we offer to increase completion rates, a long questionnaire leads to fatigue and boredom, which results in high drop outs and poor data. Additionally, improved aesthetics and the use of new media to increase respondent engagement does not guarantee high data quality for long surveys.

If clients and industries are to continue seeking advice and recommendations from the market research industry, its best that we provide them with ideas that are born from data that is statistically sound, reliable, valid and intuitive. The one way to do this is not to put our respondents to sleep with long surveys, engage them throughout the study and provide meaningful and valued incentives.

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