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   Ed Mayo

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Editorial

Peter Mouncey

‘Technology is killing the survey’

This was the subject for the joint Association of Survey Computing (ASC)/MRS evening meeting held in August, in the form of a panel of speakers followed by questions from the floor. A.J. Johnson (Ipsos MORI) chaired the evening and in the context of technological developments asked speakers to comment on whether the survey will still exist by 2015. Mike Cooke (GfK NOP) argued that it must survive, but we need to use technology more effectively in order to provide respondents with an experience that is much more rewarding than at present and fully engages them in the research process. Surveys must be less boring and of intrinsic value to recipients. Nobody will talk to us unless we become more interesting. Steve Taylor (W3DL) also expected the survey to survive, and hoped that technology would lead to increased flexibility by applying mixed-mode methods. Echoing Cooke, he hoped that the industry would at long last truly recognise the importance of respondents, perhaps by sharing findings more widely (see the Viewpoint in this issue) leading to improved cooperation. Ken Parker (Discovery Research) argued that the internet had changed the research landscape. The rush to online, fostered by squeezed budgets, was rapidly reducing quality. The relevance of surveys was also diminishing as other sources of consumer-related data became more important to clients. Fusing qualitative and quantitative methods remained the holy grail for the future. However, as Parker pointed out, 25 years ago the death of the survey was forecast within five years! Finally, Peter Harrison (Brainjuicer) thought the future was about listening, rather than asking questions. Tweets would become more important for tracking opinions, plus netnography and short surveys conducted via mobile technologies. Harrison also advocated shorter, more interesting surveys that engaged both right and left sides of the brain, explored emotions and were less rationally focused. The subsequent debate discussed the continuing role for market researchers to make sense of the rising tide of consumer-related data, especially from within social networks, and the threats from technology companies such as Google. The issue of poor questionnaire design was also raised from the floor, and the need for new skill sets that spanned the different methodologies, focused on engaging clients more effectively and created a high level of data literacy. One interesting view was that people with a Master of Fine Arts qualification were highly prized in Silicon Valley as this covered a host of skills and the ability to take a wide view of the world. Altogether, a very lively evening. Time and again,
long, boring and poorly designed questionnaires are identified as a major hurdle in respondent engagement, but is the industry any nearer seriously tackling this issue, and are we running out of time?

The issue of ‘engagement’, with respondents and clients, was also the theme of the ASC one-day conference held in late September: ‘Pizzazz in research: renewing the rules of engagement’. I hope that we will be publishing Conference Notes based on some of the presentations from this event in a future issue.

**Threats or opportunities?**

Two recent news items caught my eye. First, ‘Research-live’ (28 September) reported that Stan Sthanunathan, the VP of Marketing Strategy and Insights at Coca-Cola had caused a big stir in his opening address at the American Marketing Association’s Marketing Research Conference in Atlanta in August by announcing plans to introduce pay-for-performance in market research procurement. In the context of *IJMR*, what would this mean for methodology? I envisage some interesting confrontations when agencies produce proposals based on methodologies and sampling methods they believe are necessary to produce effective findings, and the client sees the budget implications. Or, will low-cost projects be so heavily caveated that the findings will have little real value? As Sthanunathan stated, ‘the key is to define what performance is’. Of course the success or otherwise of a research project also depends on the client – in addition to adequate funding, there’s also ensuring agencies are fully briefed, that objectives are realistic, that they truly respect the experience and professionalism of the agency, and finally that they responsibly and effectively use the findings. This is not a new issue, but it will be interesting to see how this develops. Maybe it will lead the client to realise that there is a price to be paid for research methodologies and expertise that delivers real valued-added.

The second item from Warc News (10 September) was the announcement that global giants such as Vodafone, PepsiCo and SAP are responding to the growing dependence of marketing on technology by fusing their marketing and IT functions under a Chief Marketing Technology Officer. Shiv Singh, PepsiCo’s Director of Digital N. America, thinks this will be the title of the future, replacing the Chief Marketing Officer. Singh is quoted as saying, ‘Each time I catch up with my CMO. I ask her how much she is learning about marketing technology.’ This is a development that the market research sector obviously needs to watch very carefully. I have a feeling that the technologists might gain the upper hand in this new world, and this could mean that the new masters turn to other sources of consumer information, based on new technologies, that could squeeze out traditional market research suppliers. Is this yet another potential threat from disruptive technologies, or are we now better prepared to deal with this development? Take the ASC, mentioned above. When I joined this organisation many years ago, the audience at its events seemed to primarily comprise academic researchers wanting to debate the finer points of SPSS and machine coding. Today, although still called the Association of
Survey Computing, its agenda covers all aspects of technology as applied to the full research process, covering sampling, data collection, analytics and data presentation/deliverables – and the emphasis is now much more firmly based on addressing the issues faced by market research practitioners in grappling with technological innovations. However, this is only part of the story. This new breed of client is likely to have data integration near the top of their agenda, and this is one field where market researchers need to take the initiative – which brings me back to skill-sets. Perhaps we will all need to have a Master of Fine Arts degree in order to deliver the innovation expected in the future.

A further perspective on this topic recently appeared in Information Age (www.information-age.com, 13 August), reporting the findings from a survey conducted by Informatica. Consumers feel that government open access initiatives to date have delivered little real value and many do not trust the data made available. Charles Race of Informatica concludes that, ‘If not managed properly, these complex government datasets, packed full of information that needs to be updated in real time to maintain their accuracy and value, simply present a sluggish and frustrating experience for users.’

Papers

Some of the themes within this issue interlock. Two papers cover text-mining software – one describes a new methodology, and the second is a literature review application. Three papers have brand-related themes, but from very different perspectives. One also argues the case for a new appraisal of the origins of, and role for, qualitative research. A further paper proposes a solution to handling large numbers of attributes in choice models, and the Forum article is a concept test case study describing the development of a series of research textbooks.

Viewpoint

At a time when public-sector expenditure in the UK is threatened with major cuts, Ed Mayo explains why findings from research commissioned by the government, and its agencies, should be made more openly available to citizens, leading to new innovator co-creation opportunities. Mayo also calls for more collaboration across the public sector to create a more efficient, and integrated, research programme.

How market barriers influence brand share

- A new approach to measuring brand equity
- Identifies the impact of market barriers on market share
- Provides a detailed description of market barrier factors
• Research based on data from studies conducted across market sectors within different countries.

Over the years we have published many innovative papers investigating brand equity, brand loyalty and factors that impact on market share. In the latest paper in this field, Parker and Don (Human Sciences Research Council, South Africa) advocate a new method for measuring brand equity using data drawn from over 100 studies conducted by Synovate in different countries to investigate the impact of market barriers and attitudinal equity (how people feel about brands) on brand share. The authors investigated survey data from three market sectors: automotive, fmcg and retail. The countries selected also enabled comparisons to be drawn between developed and developing economies. Eleven market barriers are described by the authors, comprising the factors that either prevent consumers purchasing the brands they are loyal to or lead to them purchasing brands they would not ideally like to buy – ‘any circumstances that get in the way of the natural propensity individuals may have to purchase a desired brand’.

The authors argue that market barriers are often ignored in research on brand loyalty, and describe how this method identifies opportunities to increase market share by minimising market barriers or increasing attitudinal equity – estimating how much market share is gained or lost due to market barriers. The findings show that availability, price and product range (all defined in detail) are the three key barriers. The methodology is illustrated by a case study from the fmcg sector in the US.

Rethinking the qualitative research paradigm

• Exploring the origins of qualitative research in pre-modern thinking
• Linking pre-modern conceptual thinking to marketing
• Examining and contrasting the quantitative and qualitative research paradigms
• Identifying the unique role qualitative research plays in exploring and understanding the essence of a brand.

In his latest paper exploring the concept of ‘essence’ in relation to brands, Barnham (Chris Barnham Research) explores how this relates to qualitative research. The first paper, in Vol. 50 Issue 2, argued for a new essence-based model (‘instantiation’) for brand communications; the second, in Vol. 51 Issue 5, contended that identifying the essence that defines ‘brandness’ is more appropriate than trying to identify the essence of a brand. In this latest paper, Barnham argues that qualitative research is essential in identifying the structure of ‘essence’. He discusses the reasons why qualitative methods are successful in a marketing and social research context, being ideally suited to exploring socially constructed phenomena, such as brands, and argues that this success is founded on qualitative research’s ability to understand essence (and its structure). While qualitative interviewing methods developed around the middle of the 20th century, the author contends that a qualitative-based philosophical view of the world predominated from the time of Plato and Aristotle through to the dawn of the scientific age at the turn of the 17th century. In this pre-modern world, all
objects were thought to be composed of hierarchical structures of essences, 'qualia', which denoted their particular characteristics. Barnham discusses the differences between quantitative and qualitative research paradigms, the aim of qualitative being to uncover how people think, deriving meaning from how concepts and ideas are structured in the minds of consumers based on the essences experienced in the world around us. The author challenges the view that differentiation lies at the heart of a brand's success. Linking to pre-modern thinking, Barnham contends that weakness in a brand could be due to it having insufficient generic values - research needs to explore both the 'genus' and the 'differentia' of a particular brand. Finally, the author discusses how neuroscience provides a link between the pre-modern view and the understanding of human cognition.

Mining text-based data: a further perspective

- Describes a learning-based approach to automating the analysis of free-text data
- Written from a researcher-user, rather than IT, perspective
- Includes a useful Q&A section to address common queries.

In Vol. 52 Issue 4, earlier this year, Schmidt provided a useful review of the developing field of text-mining software enabling the quantitative analysis of qualitative data. In the latest paper, Esuli and Sebastiani (Consiglio Nazionale delle Richerche, Pisa, Italy) describe the development of text analysis software that can be trained to automatically interpret text data from sources such as verbatim and open-ended questions. Having underlined the importance of free-text data in market research, the authors argue that a learning-based system provides researchers with a more effective, and researcher-friendly, method of applying automation to analysing and interpreting text-based data. The authors describe their 'industrial strength' Verbatim Coding System (VCS) software, which is based on 'the code', and not the codeframe, as the basic unit for analysis. The software learns to replicate the subjective behaviour contained within the training verbatims produced by a human coder through manual coded positive and negative examples. As the authors emphasise, the purpose of the paper is to demonstrate to researchers how learning-based software can be applied, rather than describe the technical structure (sources are referenced within the paper). The authors describe in detail the underlying process used by the system, plus the tests applied to check accuracy and efficiency. The authors have also included a useful Q&A section to help readers understand how the process works and to answer typical queries that readers might raise. The authors conclude with a discussion of the challenges posed by new sources of research data, such as from mobile-phone-based surveys.

Consumer–brand engagement: a review of current thinking

- An in-depth analysis of current academic and practitioner literature in the field of consumer–brand engagement
• An application of text-mining software
• The implications for research methodologies when researching consumer engagement
• How marketing practitioners and academics might collaborate more effectively to address challenges in this field
• An agenda for primary research to identify the role of unconventional media.

The paper by Gambetti and Graffigna (Università Cattolica del Sacro Cuore) provides a three-fold contribution to topics covered in recent issues of IJMR. First, it provides further evidence that academics and practitioners in the field of marketing are pursuing separate paths and need to more effectively collaborate (also see Roberts & Adams, Vol. 52 Issue 3). Second, it provides an interesting case study in the application of text-mining software (see Esuli & Sebastiani in this issue and Schmidt in Vol. 52 Issue 4). Third, it provides an in-depth analysis of published material from academic and practitioner sources in the field of consumer–brand engagement (see Barnham in this issue, and in Vol. 50 Issue 2 and Vol. 51 Issue 5; Christodoulides & de Chernatony in Vol. 52 Issue 1). Using T-lab software, the authors undertook a systematic content analysis of the literature on the concept of engagement in the field of marketing. Gambetti and Graffigna identify three key factors that play a central role in engagement related to: the customer (e.g. rise of co-creation); media (e.g. fragmentation); the company (e.g. creating a customer experience). As the authors point out, the concept of engagement is a relatively new topic in marketing-related literature, with many, often contradictory, definitions or ones that are interchangeable with older concepts such as involvement, commitment and retention. The analysis methods are described in detail: thematic analysis based on patterns of key words identifying four clusters plotted on a thematic map; specificity analysis (comparing academic and practitioner sources); word association and correspondence analysis. In addition to describing the different agendas being addressed by academics and practitioners, the authors have also identified that consumer–brand engagement by practitioners has still to address the challenges of a post-modern world such as embracing co-creation and using social media in developing innovative solutions to create more effective engagement between brand and consumer. The authors also identify a focus on tactical rather than strategic issues in the practitioner literature. Finally, Gambetti and Graffigna discuss the implications for quantitative and qualitative methods when undertaking research on engagement, and conclude with the outline of a further research project in this field focusing on the role of unconventional media in consumer–brand engagement.

Handling high numbers of attributes in conjoint-based projects
• Addresses the challenges researchers face when administering large numbers of attributes in conjoint projects
• Using partial profile choice experiments as an effective solution
• Key points from previous research to help readers design PPCE-based projects
• Identifies a further benefit for this method.

The paper by Chrzan (Maritz Research) describes a solution to the challenge faced by researchers needing to administer large numbers of attributes in conjoint-model-based projects. The author argues that respondents find it difficult to deal with more than six attributes, whereas projects may in fact require the presentation of 20 or more for the respondent to consider. Chrzan summarises the defects in attempts to date to find a solution, and proposes partial profile choice experiments (PPCEs) as a potentially more effective methodology to solve this problem as individual respondents are exposed to only a selection of the overall number of attributes being tested. The author also summarises the benefits of PPCEs that have been reported on over the past 15 years, leading to this method being provided within the main choice-based research tools on the market. As the author describes, this latest paper has two main aims. First, by summarising the earlier research in this field, it provides readers with a single source of information that can be used to design and analyse projects using PPCEs. Second, the author presents the findings from a further research experiment that compares PPCEs with the more commonly used full profile methods. The author contends that the latest experiment confirms the results of the earlier research by confirming that this approach presents a viable solution to handling large numbers of attributes. In addition, Chrzan identifies from the latest experiment that PPCEs appear to be immune from the effects of dominant attributes, a factor that can create challenges in full profile studies conducted in competitive markets.

Forum

Concept testing in the publishing sector
• Market research methods applied to book development
• Demonstrates that relatively simple research projects can deliver fresh insights to aid decision making.

In my time as a client-side researcher, I extensively used concept testing to help the publishing division at the Automobile Association develop the rapidly expanding range of UK and overseas guidebooks. We used simple methods based on the low-cost mail-survey-based methodology very successfully developed by our then publishing partner, the Reader’s Digest Association. However, at the time this was a rare application of market research in the UK book publishing industry. The Forum article by Piaw (University of Malaya) is a short, focused case study describing how market research methods were used to help develop a bestselling series of textbooks appropriate for teaching research methods in Malaysia. As the author points out in the background to the study, the use of market research in the book publishing industry as an aid to product development remains relatively rare compared to the extensive application in many other sectors of the economy. As the case study successfully demonstrates, market research concept
testing can provide publishers with valuable insights to help ensure that the finished product meets the needs of the market. This case study also shows that research projects do not have to be particularly sophisticated in order to provide useful information that helps lead to better decisions.
FORUM

The use of the concept test study in writing a series of bestselling academic books

Chua Yan Piaw
University of Malaya

Market research is important in helping publishers to understand the needs of the book market, while the concept test is important in helping authors to understand the needs of readers. This author conducted a concept test study before writing a series of research reference books. The study was carried out to identify the content, the prices and the physical aspects of the books. Based on the results of the study, this author wrote a research book series consisting of 58 chapters. The books were published by McGraw-Hill Education between 2006 and 2008. The book series has been widely used by researchers, educators and students in local higher educational institutions and is one of McGraw-Hill’s bestselling series (McGraw-Hill 2008). This paper presents the study, and shows how the results of market research could be used as the basis for writing a successful book.

Market research in the publishing industry

Although marketing research is a new trend in book publishing, compared to other marketing and servicing companies, the best publishing companies today are all marketing-driven (Baverstock 2008). For these publishers, marketing research is designed to provide information that assists companies in determining their product development and marketing strategies. Market research is used for studying the book market to keep abreast of what is selling, to identify where the potential for development

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of new product exists, to identify new markets and to provide data for this development of new books (Baverstock 1993). It helps to reduce uncertainty, monitor performance and make decisions, and assists in meeting the readers' needs in terms of content. It provides direct and most effective information about the needs of the readers. Another market strategy used by publishing companies is positioning. Positioning in publishing means establishing a book within a category in a way that buyers discern a distinct personality or an individual style that sets it apart from the competition (Ceiser et al. 1985). The markets for most scholarly books include libraries, wholesalers, independent bookstores, universities and other institutions, as well as individual scholars, professionals and researchers. Marketing research is normally conducted by publishers, not by authors.

A frequently occurring problem in the publishing industry is the oversupply of books. Oversupply of a book is one of the main causes of financial inefficiency in the book business – i.e. demand has failed to grow with publishing output. Books are published and kept in the stores because they cannot fulfil the needs of readers. The fundamental problem of publishing is that it is not market led; rather, it is supply led. Publishers generally try to find a market only after they have published a book. This lack of interest in market research before the book is published can be explained in two ways. First, it is assumed that such market research data would not be helpful in trying to predict future demand in a creative industry. Second, market research is very little used in publishing and it is easy to understand why: it can't contribute to better writing and better books (Baverstock 2008). Besides which, many publishers argue that, given the creative nature of the industry, market research would be unable to predict bestsellers as effectively as the 'experienced hunch' (their reasoning is 'We already employ brains, what is the point of paying for market research?' and 'If you are producing what some people have said they want, you are not anticipating trends and hence shrinking the potential size of your market') (Baverstock 1993).

The use of the concept test study by authors in writing a book is still rare. However, it can be a useful strategy in overcoming the problem of oversupply as well as writing a bestselling book. As a professional scholar, the author is writing for an audience of peers, and knows what they read and whose opinions will influence them. By using the concept test, the informed audience becomes part of any creative process. Authors must understand that judgement about what is published is too important to be left to publishers alone. Knowledgeable readers are enough to keep
writers and publishers on their toes, trying to do their best work (Ceiser et al. 1985; Marilyn & Tom 1990). Therefore, before writing his book, the author should conduct a concept test study to understand his consumers and their needs.

This paper details an example of a concept test study, and how the results of the market research carried out before writing could be used as the basis for producing a successful book.

**The case study**

The author was the facilitator of a 12-week research course organised by the Ministry of Education, Malaysia, between 2003 and 2006. During that time, participants lamented the dearth of reference materials in the book market to suit the local research climate. In addition, these participants had found the reference books written by overseas authors difficult to understand. Hence, there was a need for a research reference book that would suit the needs of the course participants as well as the local readers and researchers – in other words, a book that would accommodate local conditions.

By researching the book market, the author found that no one research reference book had complete information or contained details on all aspects of research. For example, some books focused only on data analysis application, while others concentrated on the theoretical aspects of either qualitative or quantitative research methods. Readers who lack research experience and knowledge will undoubtedly find the language standards and presentation styles of these books difficult to understand. Spurred by the findings of the above book market survey, the author began to make a plan to write a research reference book especially for local readers and students.

The first step in writing the book had absolutely nothing to do with writing! Instead, the author had to first determine the contents and characteristics of the book, such as its price, weight, illustrations and presentation style, as well as language. According to a 2006 book market survey involving 1000 librarians, 95% of respondents thought that the technical design of a book influences the reading rate, while 77% of them believed that the contents of a book affect procurement of the book (Most Marketing Survey Centre 2006). Market researchers often use needs assessments to gather information about what people think. Needs assessments help them understand the types of products people want and at what price. This approach also helps companies market their products
to those people most likely to buy them (Day 2008; US Bureau of Labor Statistics 2008).

Burgett (1989), a self-published bestselling author of academic books, said that before conducting a concept screening test, the author must first pick a ‘target group’, or a market to survey its needs. According to Burgett, ‘target’ means ‘knowing especially who will buy your book, why, how much they will pay (and won’t), and what kind of content will get them to purchase’. In other words, you do not write a word until you have answered those questions. Therefore, it was important for the author to conduct a needs study before writing the book.

Objective of the study

This study aimed to gather information about the contents and characteristics of an ideal research reference book.

Method

The study employed a non-experimental design where a survey method was used to collect data. The questionnaire used was one designed by the author.

The respondents

The respondents were participants of two series of research courses organised by the Teacher Training Division of the Ministry of Education, Malaysia. The respondents (n = 582) formed a purposive sample of the lecturer population of the 28 teacher training institutes. Table 1 presents the profile of the respondents.

As can be seen in Table 1, the majority of the respondents have a second university degree (69.4%), at least three years of research experience (82.8%), read research reference books for at least three hours a week (76.1%), read one to six research books a year (one to two books – 63.1%; three to five books – 35.2%) and purchased fewer than six research reference books within the past three years (fewer than three books – 67.9%; three to five books – 29.6%). The data indicate that the respondents are educated, have adequate knowledge about research reference books and possess a habit of reading research reference books. Hence, the respondents were considered as a ‘target group’ that was eligible to take part in this needs study.
Table 1  Profiles of the respondents to the needs study

<table>
<thead>
<tr>
<th>Profile</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational background</td>
<td>1st degree</td>
<td>164</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>2nd degree</td>
<td>404</td>
<td>69.4</td>
</tr>
<tr>
<td></td>
<td>3rd degree</td>
<td>14</td>
<td>2.4</td>
</tr>
<tr>
<td>Research experience</td>
<td>Less than 3 years</td>
<td>100</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>3 to 5 years</td>
<td>347</td>
<td>59.6</td>
</tr>
<tr>
<td></td>
<td>More than 5 years</td>
<td>135</td>
<td>23.2</td>
</tr>
<tr>
<td>Habit of reading research reference books</td>
<td>Less than 3 hours a week</td>
<td>139</td>
<td>23.9</td>
</tr>
<tr>
<td></td>
<td>3 to 5 hours a week</td>
<td>239</td>
<td>41.1</td>
</tr>
<tr>
<td></td>
<td>More than 5 hours a week</td>
<td>204</td>
<td>35.0</td>
</tr>
<tr>
<td>Number of research reference books read this year</td>
<td>1 to 2</td>
<td>367</td>
<td>63.1</td>
</tr>
<tr>
<td></td>
<td>3 to 5</td>
<td>205</td>
<td>35.2</td>
</tr>
<tr>
<td></td>
<td>More than 5</td>
<td>10</td>
<td>1.7</td>
</tr>
<tr>
<td>Number of research reference books purchased in last 3 years</td>
<td>Fewer than 3</td>
<td>395</td>
<td>67.9</td>
</tr>
<tr>
<td></td>
<td>3 to 5</td>
<td>172</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>More than 5</td>
<td>15</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Note: The average age of the participants is 38.89 years old.

**Instrumentation and data collection**

A questionnaire entitled ‘Ideal Research Reference Book Questionnaire’ consisting of 15 ordinal scale items and an open-ended item was used to collect data concerning the contents and characteristics of an ideal research reference book. The respondents answered the questionnaire individually in a classroom setting.

**Data analysis**

Data analysis of the ordinal scale items was done using a descriptive method. The descriptive analysis calculated the profile of the respondents, and the characteristics and specifications of an ideal research book in frequencies and percentages, whereas the quantitative responses of the open-ended item were evaluated by a multiple responses analysis. The multiple responses analysis presented the number of responses, percentage of responses and percentage of cases for each of the contents suggested by the respondents for an ideal research reference book.

**Results of the study**

The results of the descriptive analysis and the multiple responses analysis are presented below.
Characteristics of an ideal research reference book

Tables 2 and 3 present the data collected from the respondents of the survey concerning the characteristics and specifications of an ideal research reference book.

The data in Tables 2 and 3 indicate that 93.3% of the survey respondents thought that the price of an ideal research reference book should be between RM20 and RM49. About 80% of the respondents said the book should be 200 to 399 pages long. The ideal weight for the book, according to 93.3% of the respondents, should be between 400 and

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Characteristics and specifications of an ideal research reference book</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book characteristics</strong></td>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Price</td>
<td>RM10–RM19</td>
</tr>
<tr>
<td></td>
<td>RM20–RM29</td>
</tr>
<tr>
<td></td>
<td>RM30–RM39</td>
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<tr>
<td></td>
<td>RM40–RM49</td>
</tr>
<tr>
<td>Thickness</td>
<td>100–199 pages</td>
</tr>
<tr>
<td></td>
<td>200–299 pages</td>
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<td></td>
<td>300–399 pages</td>
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<td></td>
<td>400–499 pages</td>
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<tr>
<td>Weight</td>
<td>400 g</td>
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<td>500 g</td>
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<td>600 g</td>
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<td></td>
<td>700 g</td>
</tr>
<tr>
<td>Size</td>
<td>Smaller than A4 size</td>
</tr>
<tr>
<td></td>
<td>A4 size</td>
</tr>
<tr>
<td>Type of book cover</td>
<td>Soft cover</td>
</tr>
<tr>
<td></td>
<td>Hard cover</td>
</tr>
<tr>
<td>Illustrations</td>
<td>Occupy less than 10% of book</td>
</tr>
<tr>
<td></td>
<td>10–19%</td>
</tr>
<tr>
<td></td>
<td>20–29%</td>
</tr>
<tr>
<td></td>
<td>30–39%</td>
</tr>
<tr>
<td>Presentation style</td>
<td>Text only</td>
</tr>
<tr>
<td></td>
<td>Text and illustrations</td>
</tr>
<tr>
<td></td>
<td>Text, examples and illustrations</td>
</tr>
<tr>
<td>Focus of contents</td>
<td>Research theories</td>
</tr>
<tr>
<td></td>
<td>Research theories and practices</td>
</tr>
<tr>
<td></td>
<td>Research practices</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>Malay</td>
</tr>
<tr>
<td>Focus on local research climate</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
Table 3  Summary of the characteristics and specifications of an ideal research reference book

<table>
<thead>
<tr>
<th>Book characteristics</th>
<th>% of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price: between RM20 and RM49</td>
<td>93.3</td>
</tr>
<tr>
<td>Thickness: between 200 and 399 pages</td>
<td>79.7</td>
</tr>
<tr>
<td>Weight: between 400 and 600 grams</td>
<td>93.3</td>
</tr>
<tr>
<td>Size: A4</td>
<td>53.6</td>
</tr>
<tr>
<td>Type of cover: soft cover</td>
<td>56.5</td>
</tr>
<tr>
<td>Illustrations: occupy between 10% and 29% of book</td>
<td>83.4</td>
</tr>
<tr>
<td>Presentation style: text, examples and illustrations</td>
<td>48.5</td>
</tr>
<tr>
<td>Focus of contents: research theories and practices</td>
<td>61.7</td>
</tr>
<tr>
<td>Language: Malay</td>
<td>67.5</td>
</tr>
<tr>
<td>Focus on local research climate</td>
<td>84.2</td>
</tr>
</tbody>
</table>

600 grams. A total of 53.6% respondents thought the trim size of the book would be best at $8 \times 12$ inches (roughly A4 size), while 56.5% preferred a soft-cover book. Among the respondents to the survey, 83.4% thought that at least 10–29% of the book should be filled with illustrations. The appropriate presentation style, according to 48.5% of the respondents, would be a mixture of text, examples and illustrations. Nearly 62% of the respondents said the book should provide a balanced combination of research theories and practices, and 67.5% wanted the book to be written in the Malay language. Finally, the majority of the respondents (84.2%) stated that they needed a research book written based on the local research climate.

Contents of an ideal research reference book

The summary results of the multiple responses analysis on the open-ended questionnaire item are presented in Table 4. Table 4 shows that this questionnaire item elicited a total of 5281 responses. The item called forth information on aspects of research activities that include research methods (including research design, sampling procedure, measurement, instrumentation, APA (American Psychological Association) report writing format, quantitative and qualitative research methods), fundamental research statistics (including data analysis methods, data analysis using SPSS, computer-aided qualitative analysis, SPSS step-by-step, reliability analysis, correlation analysis, non-parametric tests, regression analysis, parametric tests), and advanced research statistics (including factor analysis, ANCOVA, MANOVA and other multivariate tests, structural equation modelling analysis and other advanced research statistics).
Table 4 Summary of contents of an ideal research reference book

<table>
<thead>
<tr>
<th>Contents</th>
<th>No. of responses</th>
<th>% of responses</th>
<th>% of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research method</td>
<td>189</td>
<td>3.6</td>
<td>32.5</td>
</tr>
<tr>
<td>Research design</td>
<td>225</td>
<td>4.3</td>
<td>38.7</td>
</tr>
<tr>
<td>Sampling procedure</td>
<td>188</td>
<td>3.6</td>
<td>32.3</td>
</tr>
<tr>
<td>Measurement in research</td>
<td>179</td>
<td>3.4</td>
<td>30.8</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>270</td>
<td>5.1</td>
<td>46.4</td>
</tr>
<tr>
<td>Format of writing report</td>
<td>271</td>
<td>5.1</td>
<td>46.6</td>
</tr>
<tr>
<td>Quantitative research method</td>
<td>155</td>
<td>2.9</td>
<td>26.6</td>
</tr>
<tr>
<td>Qualitative research method</td>
<td>313</td>
<td>5.9</td>
<td>53.8</td>
</tr>
<tr>
<td>Data analysis method</td>
<td>301</td>
<td>5.7</td>
<td>51.7</td>
</tr>
<tr>
<td>Research ethics</td>
<td>318</td>
<td>6.0</td>
<td>54.6</td>
</tr>
<tr>
<td>Correlation analysis</td>
<td>202</td>
<td>3.8</td>
<td>34.7</td>
</tr>
<tr>
<td>Action study</td>
<td>234</td>
<td>4.4</td>
<td>40.2</td>
</tr>
<tr>
<td>Regression analysis</td>
<td>347</td>
<td>6.6</td>
<td>59.6</td>
</tr>
<tr>
<td>Non-parametric tests</td>
<td>204</td>
<td>3.9</td>
<td>35.1</td>
</tr>
<tr>
<td>Parametric tests</td>
<td>190</td>
<td>3.6</td>
<td>32.6</td>
</tr>
<tr>
<td>Writing research report according to APA format</td>
<td>174</td>
<td>3.3</td>
<td>29.9</td>
</tr>
<tr>
<td>Factor analysis</td>
<td>240</td>
<td>4.5</td>
<td>41.2</td>
</tr>
<tr>
<td>SPSS step-by-step</td>
<td>234</td>
<td>4.4</td>
<td>40.2</td>
</tr>
<tr>
<td>MANOVA and other multivariate tests</td>
<td>193</td>
<td>3.7</td>
<td>33.2</td>
</tr>
<tr>
<td>Structural equation modelling analysis (AMOS)</td>
<td>189</td>
<td>3.6</td>
<td>32.5</td>
</tr>
<tr>
<td>Advanced research statistics</td>
<td>270</td>
<td>5.1</td>
<td>46.4</td>
</tr>
<tr>
<td>Computer-aided qualitative analysis</td>
<td>188</td>
<td>3.6</td>
<td>32.3</td>
</tr>
<tr>
<td>Reliability analysis</td>
<td>207</td>
<td>3.9</td>
<td>35.6</td>
</tr>
<tr>
<td>Total responses</td>
<td>5,281</td>
<td>100.0</td>
<td>907.4</td>
</tr>
</tbody>
</table>

Based on the results of the concept test study, the author realised that it was impossible to write a book that would meet all the expectations of the readers, especially if it had to be priced below RM50 (US$15) and must not be more than 400 pages. According to a book market research survey (Most Marketing Survey Centre 2006), 41% of the respondents who bought at least one book in the past year, did so principally because of the book contents. In addition, series books appealed to 22% of respondents. Therefore, based on the research evidence, and after some consideration, the author decided to write and publish a series of books instead of cramming everything there is to know into one stand-alone book.

Based on the findings of the needs study, the author wrote a series of research reference books entitled Research Methods and Statistics. Altogether, there are five volumes, 58 chapters and 1677 pages.
Reviewers' comments

Besides the needs assessment on the target group, the book reviewers played an important role in pointing out the strengths and weaknesses, as well as the market value of the book. The drafts of the books were reviewed by four lecturers from local universities who are teaching research methods and statistics courses. The comments of the reviewers were mostly positive. One reviewer's report is presented below.

REVIEW REPORT

Organization and coverage of topics
1. The organization of the book appears to be adequate and well-sequenced. The overall organization of this proposed book suits my syllabus.
2. Chapters look to be sufficient in scope. To add or expand the content would make the book too thick or too detailed, to trim may make the coverage inadequate.
3. Multivariate data analysis has been used as the main text for my course. It is difficult to compare because the focus is really different. I see the proposed book as a complement because of the practical approach in using SPSS to datasets. The strength of this book is the clear step-by-step illustrations of how to use SPSS to analyse specific set of data, interpret and report the results.
4. In my opinion the materials presented are accurate and timely.
5. The exhibits, tables and examples sufficiently amplify the text discussion. However, some pages do look too busy (see page 72 for example) and others quite empty (see page 71 for example). I am sure the final finished book will look a lot better with adjustments.

Strengths/weaknesses
6. The four major strengths of the text: (1) simple, easy-to-understand language, (2) wide coverage of the methods; (3) clear instructions on how to use SPSS; and (4) presentation on how to write the report at the end of each analysis.
7. The major weakness is insufficient discussion and activities at the end of each chapter.
8. After considering the strengths and weaknesses of this book, I would use this book hand in hand with another textbook.
Suggestion

9. This book would be a good practical guide for any student involved in research. As it is, the book would be a useful reference for data analysis and research methodology courses. I would consider using this book for my subject.

(Data of Reviewer 2; data provided by McGraw-Hill Education (Malaysia))

Outcome of the study

Based on the reviewers' comments, the drafts were modified. The book series was published by McGraw-Hill Education between 2006 and 2008. The first two volumes were published in June 2006; the third volume was put out at the end of 2007, while the fourth and fifth volumes were brought out at the end of 2008.

It is the first series of research reference books, written in the Malay language, to cover most aspects of research activities. The books are widely used by researchers, educators and students in higher educational institutions in Malaysia as well as Indonesia. This book series is ranked among McGraw-Hill's bestselling titles (see Figure 1).

The contents of this five-volume book are listed below.

Volume 1

Title: Book 1 – Research Methods

Contents
Chapter 1: Introduction to Research
Chapter 2: Research Ethics
Chapter 3: Literature Review
Chapter 4: Research Design
Chapter 5: Experimental Study
Chapter 6: Quasi-Experimental Study
Chapter 7: Survey Study
Chapter 8: Field Study
Chapter 9: Case Study
Chapter 10: Action Study
Chapter 11: Historical Study
Figure 1 The research book series was listed among McGraw-Hill's bestselling books

Chapter 12: Probability Sampling Procedures
Chapter 13: Non-probability Sampling Procedures
Chapter 14: Measurement in Research
Chapter 15: Index, Scales and Specific Measurement Procedures
Chapter 16: Pilot Study
Chapter 17: Research Instrumentation
Chapter 18: Format of Writing Research Report
Volume 2
Title: Book 2 – Fundamental Research Statistics

Contents
Chapter 1: Descriptive Statistics
Chapter 2: Inferential Statistics and Significance Test
Chapter 3: Qualitative Data Analysis
Chapter 4: Data Preparation for SPSS Program
Chapter 5: Reliability of Research Instrument
Chapter 6: Chi-Square Tests
Chapter 7: T Tests
Chapter 8: ANOVA Tests
Chapter 9: Correlation Tests
Chapter 10: Multiple Regressions
Chapter 11: Reporting the Results of Data Analysis Based on the APA Format

Volume 3
Title: Book 3 – Fundamental Research Statistics: Data Analysis for Ordinal and Nominal Scales

Contents
Chapter 1: Measurement Scales and Statistical Test
Chapter 2: Data Preparation for SPSS Program
Chapter 3: Data Transformation
Chapter 4: Mann-Whitney U Test
Chapter 5: Wilcoxon T Test
Chapter 6: Kruskal-Wallis H Test
Chapter 7: Friedman Test
Chapter 8: Spearman Correlation Test
Chapter 9: Contingency Table Data Analysis
Chapter 10: Cramer V Correlation Test
Chapter 11: Reporting the Results of Data Analysis Based on the APA Format

Volume 4
Title: Book 4 – Advanced Research Statistics: Univariate and Multivariate Tests
Contents
Chapter 1: Research Statistics Concept and Data Preparation for SPSS Program
Chapter 2: One-Way ANOVA Test
Chapter 3: Two-Way ANOVA Test
Chapter 4: SPANOVA Test
Chapter 5: ANCOVA Test
Chapter 6: Independent Samples MANOVA Test
Chapter 7: Repeated Measures MANOVA Test
Chapter 8: MANCOVA Test
Chapter 9: Trend Analysis

Volume 5
Title: Book 5 – Advanced Research Statistics: Regression Test, Factor Analysis and Structural Equation Modeling Analysis

Contents
Chapter 1: Data Preparation for SPSS Program
Chapter 2: Partial Correlation Test
Chapter 3: Multiple Regressions Analysis
Chapter 4: Logistics Analysis
Chapter 5: Log-Linear Analysis
Chapter 6: Factor Analysis
Chapter 7: Discriminant Analysis
Chapter 8: Cluster Analysis
Chapter 9: Structural Equation Modeling Analysis Using AMOS

The specifications of the five research reference books are presented in Table 5. The covers of this book series are shown in Figure 2. The details of the five volumes can be viewed at Amazon.com.¹

Conclusion

This report presents a real situation. This real case study indicates that the concept screening test is a practical and useful strategy to apply before writing a book. Needs assessment provides up-to-date, relevant

¹ https://www.amazon.com/exec/obidos/search-handle-url/ref=ntt_sthr_dp_x__?encoding=UTF8&search- term=Chua%20Yan%20Piau
Table 5 Specifications of the products of the needs study

<table>
<thead>
<tr>
<th>Book characteristics</th>
<th>Volume 1 (Book 1)</th>
<th>Volume 2 (Book 2)</th>
<th>Volume 3 (Book 3)</th>
<th>Volume 4 (Book 4)</th>
<th>Volume 5 (Book 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>RM38 (US$15)</td>
<td>RM33 (US$13)</td>
<td>RM47 (US$22)</td>
<td>RM49 (US$23)</td>
<td>RM49 (US$23)</td>
</tr>
<tr>
<td>Thickness</td>
<td>325 pages</td>
<td>221 pages</td>
<td>373 pages</td>
<td>348 pages</td>
<td>405 pages</td>
</tr>
<tr>
<td>Weight</td>
<td>510 g</td>
<td>370 g</td>
<td>600 g</td>
<td>530 g</td>
<td>620 g</td>
</tr>
<tr>
<td>Size</td>
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<td>A4</td>
<td>A4</td>
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</tr>
<tr>
<td>Type of cover</td>
<td>Soft cover</td>
<td>Soft cover</td>
<td>Soft cover</td>
<td>Soft cover</td>
<td>Soft cover</td>
</tr>
<tr>
<td>Illustrations (%)</td>
<td>±20%</td>
<td>±20%</td>
<td>±25%</td>
<td>±25%</td>
<td>±25%</td>
</tr>
<tr>
<td>Presentation style</td>
<td>Text, examples and illustrations</td>
<td>Text, examples and illustrations</td>
<td>Text, examples and illustrations</td>
<td>Text, examples and illustrations</td>
<td>Text, examples and illustrations</td>
</tr>
<tr>
<td>Focus of contents</td>
<td>Research theories and practices</td>
<td>Research theories and practices</td>
<td>Research theories and practices</td>
<td>Research theories and practices</td>
<td>Research theories and practices</td>
</tr>
<tr>
<td>Language</td>
<td>Malay language</td>
<td>Malay language</td>
<td>Malay language</td>
<td>Malay language</td>
<td>Malay language</td>
</tr>
</tbody>
</table>

Figure 2 Covers from the Research Method and Statistics book series
and specific information about a potential product. This bestselling five-volume set was written based on the results of the needs assessment conducted by the author. The data collected from the survey respondents (target group) provided valuable guidance for writing and publishing the books. The research information formed a strong connection between the needs of the readers and the author’s book writing ideas. The author would not have been confident enough to write the books if he had no notion what local readers wanted to read. Finally, the results of this study can also be used as secondary market research data by writers in other countries and in other fields of studies.

References


About the author

Dr Chua Yan Piaw is a senior lecturer at the University of Malaya, Malaysia. He has written 32 books, including academic books for secondary schools and higher education. The subjects of his writing include creative and critical thinking skills, research methodology and statistics, calligraphy, art education, science and chemistry.

Address correspondence to: Chua Yan Piaw, PhD, Senior Lecturer, Institute of Principalship Studies, University of Malaya, Level 2, Block C, Kompleks Kampus Kota UM, Jalan Tun Ismail, 50480 Kuala Lumpur, Malaysia.

Email: chuayp@um.edu.my