Encroaching on Freedoms? Values related to freedom and readiness to accept social marketing activities in Australia and Japanese students.

Kaoru Nosaka

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Encroaching on Freedoms?

Values related to freedom and readiness to accept social marketing activities in Australian and Japanese students

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BPhEd, MBA

This thesis is presented in fulfilment of the requirements for the degree of

Doctor of Philosophy

Faculty of Business and Law

Edith Cowan University

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Date: 16 May 2011
Do Australian and Japanese university students feel that social marketing is encroaching on their freedoms or empowering them? For example, how do they react to social marketing messages such as ‘Don’t Drink and Drive’ and ‘Reduce, Reuse, Recycle’?

Social marketing activities include advocating for environmental change, laws, and regulations as well as making recommendations to individuals to change behaviours to promote the good of society; however, some people believe that such activities are attempts to control people, infringing upon their individual freedom. While behavioural models and theories have recognised the influence of an individual’s predisposition towards a recommended behaviour (such as quitting smoking), at present, there has been little attention paid to an individual’s predisposition towards the social change directives themselves, the social marketing activities/techniques in general; the present study is calling this predisposition the individual’s ‘readiness to accept’ social marketing activities. Hence, this study investigated the influence of values relating to the freedom of the individual on ‘readiness to accept government-sponsored social marketing activities’ in Australian and Japanese university students aged between 18 and 23 years.

A mixed methods design of qualitative and quantitative studies was used in this research. First, focus groups interviews were conducted with Australian and Japanese university students aged between 18 and 23 years in order to explore the concepts of readiness to accept government-sponsored social marketing activities and values relating to the freedom of the individual. The interviews revealed that readiness to accept government-sponsored social marketing activities consisted of two-lower concepts: readiness to accept government involvement in social marketing activities, and readiness to accept government’s social marketing approaches, in both the Australian and Japanese groups. They also revealed that definitions of individual freedom differed between the Australian and Japanese groups. These findings informed the subsequent development of a questionnaire instrument for the main survey.
In the main study, the self-administered-pen-and-paper questionnaire survey was implemented with 231 Australian and 252 Japanese university students aged between 18 and 23 years. The main study tested relationships among values relating to the freedom of the individual, readiness to accept government involvement in social marketing activities, and readiness to accept government’s social marketing approaches, mainly using exploratory and confirmatory factor analyses and structural equation modeling (SEM) tests.

The results overall showed that there were no relationships among the three concepts of interest in both the Australian and Japanese cohorts. This; however, did not necessarily mean that values had no influence on readiness of acceptance in a social marketing context. The influence would be detected if the perception of value domains were taken into account.

Another key finding of the main study was that readiness to accept government-sponsored social marketing activities was likely to affect individual decision whether they would take action as recommended or not, through the intermediation of actual government’s approaches. The results of the main study also showed the impact of cultural differences on the Australian and Japanese student respondents, their answers, attitudes, and behaviours, which suggested the necessity of consideration of cultural differences for future social marketing planning and implementation.
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Chapter 1: INTRODUCTION

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. (Universal Declaration of Human Rights, Article 1.)

Live free or die! (New Hampshire State motto)

1.1 Research Background

Social marketing is “the application of commercial marketing technologies to the analysis, execution, and evaluation of programs designed to influence the voluntary or involuntary behaviour of target audiences in order to improve the welfare of individuals and society” (Donovan & Henley, 2003, p.6 after Andreasen, 1994). Originating in the 1960s, social marketing has been applied to a variety of social issues (Andreasen, 2006) such as family planning, air pollution, nutrition, smoking, road safety, and AIDS. Some of these challenges have resulted in desired outcomes as seen in the following successful instances: ‘20/20 The Way for Clean Air’ in Canada, ‘Helicobacter pylori campaigns’ in US, ‘Stop Aids’ in Switzerland, and ‘Go for 2 fruit & 5 veg’ in Australia (303, 2007; Social Marketing Institute, 2007a, 2007b; Tools of Change, 2007). Consequently, such achievements have led social marketing to gain wider acceptance from influential organisations, professionals and researchers as a useful tool for social change (Andreasen, 2006; Donovan & Henley, 2003; Kotler, Lee, & Roberto, 2002). However, social marketing becomes successful only when social marketers fully understand influential factors on individual behaviours and carefully choose appropriate social marketing strategies (Andreasen, 1997).
Several factors have been identified in theoretical frameworks known as ‘social cognition’ models (Godin, 1994; Norman & Conner, 1996). These include the Health Belief Model (Rosenstock, 1974; Rosenstock, Strecher, & Becker, 1988), the Theory of Reasoned Action (Ajzen & Fishbein, 1973; Fishbein, 1967; Fishbein, Middlestadt, & Hitchcock, 1991), and the Transtheoretical Model (Prochaska & DiClemente, 1983; Prochaska & Marcus, 1994; Prochaska & Velicer, 1997). While each model has added to theory, many overlap conceptually, leading to their being re-evaluated and re-worked by academics (e.g. Elder, Geller, Hovell, & Mayer, 1994; Fishbein, Triandis, et al., 1991). In particular, Fishbein, Triandis, Kanfer, Becker, Middlestadt, and Eichler (1991) suggested eight necessary conditions for adopting socially desirable behaviours: ‘Intention’, ‘No environmental constraints’, ‘Ability’, ‘Anticipated outcomes’, ‘Social norms’, ‘Moral’, ‘Emotion’, and ‘Self-efficacy’. The first three are prerequisite and sufficient conditions to influence behaviour. However, the other situations may still arise where those conditions are not enough to ensure that a desired behaviour will occur in the real world, as in the case discussed below.

In May 2007, a law requiring adults to wear seat belts was again rejected in New Hampshire, US, which is now the only state in the country without that law. The Bill was introduced based on the belief that “seat belt legislation is the most cost-effective and simplest means of cutting deaths and injuries in highway collisions” (Zezima, 2007). However, the belief was also expressed that “buckling up and being told you have to buckle up are two very different things” (Zezima, 2007). One committee member of the State Senate transportation committee stated that “requiring people to do things breeds resentment, while encouragement does not…” (Zezima, 2007). So, even when the previously-mentioned three essential conditions are satisfied (i.e. people have an intention to wear a seat belt, no physical and structural constraints that prevent them from wearing the belts, and the skills to wear them, and have a car equipped with the belts), if they have a negative predisposition to being told to buckle up, they may show some reluctance to act as recommended. Although this is a case relating to legislation rather than social marketing, it seems to suggest that an individual’s general acceptability of social marketing activities may itself play an important role in the decision whether or not
they adopt desired behaviours, along with the three identified essential conditions. While behavioural models and theories have recognised the influence of an individual’s predisposition towards a recommended behaviour (such as quitting smoking), at present, there has been little attention paid to an individual’s readiness to accept social marketing activities (for example, the Quit! Campaign itself). Social marketing activities include advocating for environmental change, laws, and regulations as well as making recommendations to individuals to change behaviours to promote the good of society. Some people believe that such activities are attempts to control people, infringing their individual freedom (Pettit, 1997), while others maintain laws and regulations are necessary for an orderly society.

Freedom is a value, and personal values are predictors of attitudes and behaviours (England, Dhingra, & Agarwal, 1974; Maio & Olson, 1994; Rokeach, 1973; Schwartz, 1999). Personal values have been used as factors to predict consumers’ attitudes and behaviours in commercial marketing (see De Pelsmacker, Driesen, & Rayp, 2005; Lowe & Corkindale, 1998; Vinson, Scott, & Lamont, 1977). They have also attracted additional remarks in a social marketing context. For example, Kristiansen (1985) showed some correlations between personal values and preventative health behaviours. Staub (1989) revealed the relationships between personal and societal values and benevolence and doing harm. The influences of personal values on HIV/AIDS risk behaviours were identified by Chernoff and Davison (1999). However, to the best of the researcher’s knowledge, prior to this study, no social marketing research has examined personal values in relation to the concept of readiness of acceptance, nor attempted to operationalise the concept of readiness in relation to personal values. Based on this, it appeared quite important to operationalise an individual’s readiness to accept social marketing activities and consider it with the concept of the freedom of the individual in a social marketing context.

---

1 It would be more precise to say ‘readiness to accept social change directives from a third party such as government and non-profit organisations, using social marketing activities/techniques’ but that statement is shortened in the rest of this thesis to ‘readiness to accept social marketing activities’ in the interest of readability.
The current study investigated the readiness to accept social marketing and the values of individual freedom, focusing on government-sponsored social marketing activities particularly. This was because governments play an important role in a social marketing context as a maker of laws and regulations related to social issues, and is a major sponsor of social marketing campaigns. In addition, this study took a cross-cultural viewpoint as it was deemed that cross-cultural comparison between Western and non-western cultures; Australia and Japan in this study; could more clearly identify the influence of values relating to the freedom of the individual on readiness to accept government-sponsored social marketing activities. Previous cultural, anthropological, and psychological studies had already mentioned specific differences between the Australia and Japanese cultures in regards to the value of freedom (Doi, 1981; Nakane, 1973); accordingly, some differences in the readiness of acceptance between the Australian and Japanese cultures were also expected.

1.2 Overall Aims

There were four aims in this study, all relating to Australian and Japanese students aged between 18 and 23 years:

1. to explore the key elements in operationalising a concept of readiness to accept government-sponsored social marketing activities through qualitative research. ‘Operationalising’ in this study signified to transform a concept of readiness to accept government-sponsored social marketing activities into quantitative variables for applying the concept to quantitative data collection and analysis (refer to Comim, 2001 for more details);

2. to quantitatively investigate relationships between values relating to the freedom of the individual and the readiness of acceptance based on relevant literature and findings of the qualitative research;

3. to quantitatively examine whether or not there are significant differences in concept of readiness of acceptance, values relating to the freedom of the individual, and relationships between values and readiness; and

4. to make practical suggestions, based on the interpretation of the above mentioned results, to improve government’s social marketing strategies.
1.3 Statement of the Problem

This section discusses four main problems that led the researcher to the present study. The discussion is developed from intellectual and practical viewpoints with the four areas: 1) government and a nanny-state, 2) values relating to individual freedom in a social marketing context, 3) readiness to accept social marketing activities, and 4) cultural values.

1.3.1 Government and nanny state

Although many successful social marketing programs have been carried out in partnerships or collaboration with non-profit organisations or non-government organisations, it is certain that governments have taken the initiative in carrying out the programs for solving social issues in many countries. Cialdini (1994) expressed that “one should be more willing to follow the suggestions of someone who is a legitimate authority” (p.212) and governments should be one of the authorities; therefore, people should listen to governments readily. However, in reality, despite the credibility of non-governmental organisations (Jalleh & Donovan, 2005) like the Cancer Foundation of Western Australia and the Heart Foundation in Australia, people may be “somewhat sceptical or cynical about various warnings and threats issued by government organisations” (Donovan & Henley, 2003, p.77). Some people, for example drug users, may see government sponsored anti-drug campaigns as being biased and out of touch (Perman & Henley, 2001). Academics (e.g. Henley, 2006; Knag, 1997; Rothschild, 1999) and media (e.g. Marrin, 2007) have interpreted such unfavourable attitudes towards government-sponsored messages as relating to the perception of government as a “nanny-state”. In a nanny-state, people perceive a government “as having excessive interest in or control over the welfare of its citizens, especially in the enforcement of extensive public health and safety regulations” (American Heritage Publishing Company, 2000), because people feel as if they were treated like children, intimidated and told what to do or not to do. Where such perceptions persist, people may be reluctant to accept government-sponsored social marketing activities. In this situation, how far can the government go? Can it engage in courtesy/manners/etiquette campaigns as seen in some countries (e.g. fine for chewing gum in public in Singapore and a city regulation against ‘smoke-walk’ in Tokyo, Japan)? Should it just watch a decline in moral standards? More
preliminarily, how do people actually perceive government-sponsored social marketing activities? Government should answer these questions before having any expectation that their social marketing activity will be effective.

1.3.2 Values relating to individual freedom in a social marketing context

Attitudes towards the nanny-state, mentioned in the previous section, seem well-represented by the New Hampshire state motto; “live free or die” (New Hampshire Government, 2007): some people believe that they would die before they would live their lives, being told what to do or not to do by others. This motto is the belief, and the belief is human values. That is, it can be reasonably assumed that values relating to the freedom of the individual may influence people’s acceptance or rejection of government-sponsored social marketing activities. In fact, conflict between government’s paternalistic intervention in public good and civil liberties has been repeatedly discussed in public health areas (e.g. Baker, 1980; Baker & Teret, 1981; Bayer, 2007; Jones & Bayer, 2007; Perkins, 1981). However, those discussions were based on viewpoints of social marketing practitioners, including authors, social marketers, or governors, and there was no empirical study examining relationships between the values relating to the freedom of the individual and people’s attitudes towards government’s interventions into activities for solving social issues. Although earlier researchers in social marketing like Kristiansen (1985), Staub (1989), and Chernoff and Davison (1999) empirically elucidated the influence of human values on people’s intentions to behave as recommended, their studies again did not take into account the influence of values on people’s general attitudes towards social marketing activities. Figure 1.1 depicts a conceptual framework of the current study in relation to the previous research. The previous research deemed that values would directly influence individual’s decision whether they would behave as recommended or not; however, the present study considered that values would more directly affect individual attitudes towards social marketing activities (more accurately social change directives) and that attitudes would influence their response towards recommendations.
Existing studies: focusing on direct influences of values on outcomes

Current study: focusing on direct influence of values on attitudes

1.3.3 Readiness to accept social marketing activities

Originally, this study began with the researcher’s simple question ‘why is people’s readiness to accept being told what to do or not to do paid little attention, although it seems quite natural that people cannot accept anything that is over their permissible range, no matter whether that is something good for their health or for society?’. Social marketers have to address increasingly broader and more complex social issues and must fully understand the overall factors that influence individual behaviours. Therefore, why don’t they include ‘readiness of acceptance’ as an additional behaviour influencer? Understanding the function of and defining an individual’s readiness of acceptance in a social marketing context were likely to complement existing approaches in social cognition models. The readiness could be measured by asking respondents a question, such as ‘How ready are you?’ and quantifying responses with Likert scales. However, this
was problematic, since individuals have their own definition of readiness (Patton, 2002) and a concept of readiness to accept social marketing activities had never been clearly operationalised. It was required to explore key elements of the concept of readiness and then transform the concept into quantifiable and comparable variables.

Figure 1.2 shows metaphors of disagreements between social marketing receivers (people) and providers (governments, non-government organisations, non-profit organisations, or social marketers).

**Metaphor 1. Disagreement in capacity between receiver and provider**

![Diagram of metaphor 1](image)

As seen in metaphor 1 of the figure, even if the shapes are the same between the two parties, the receiver can accept only its capacity and the excess runs out from the receiver.

An important factor may be not only the capacity but also the shape (see metaphor 2 of the figure). Even if the capacities are the same, the receiver cannot accept the provider unless their shapes are the same. That is, those capacities and shapes represent individual readiness to accept social marketing activities. Social marketers must know the influence...
of the readiness and plan and implement social marketing that could fit with the readiness or should social marketers change the receivers’ capacities or the shapes for fitting with the providers’?

1.3.4 Cultural values in western and non-western societies

Conflict between government’s paternalistic intervention in public good and civil liberties (e.g. Baker, 1980; Baker & Teret, 1981; Bayer, 2007; Jones & Bayer, 2007; Perkins, 1981) was discussed only within European and American values. Accordingly, it was still unknown whether that conflict also occurs in non-western cultures or if it was peculiar to western cultures. Values are sources of guidance in society and different cultures have different perceptions of values, as seen in studies by Wierzbicka (1997), Lowe and Corkindale (1998), Hofstede (2001), or Schwartz (2001). Therefore, it was reasonably assumed that people in non-western cultures would have different perceptions of values relating to the freedom of the individual and would respond differently to the government’s paternalistic intervention from Europeans and Americans. It would be useful to compare cultural values relating to the freedom of the individual and readiness to accept government-sponsored social marketing activities both in western and non-western cultures (e.g. in Australia and Japan respectively in this study) when applying social marketing to non-western cultures.

1.4 Research Questions

There were six secondary questions in this study. Secondary questions 1, 2, and 3 were explored through qualitative investigation, questions 5 and 6 were examined by quantitative research, and question 4 was studied with both qualitative and quantitative inquiries. Then the researcher attempted to answer the primary research question of this study by considering and discussing the answers to the secondary questions.

Primary research question

How do cultural values relating to the freedom of the individual influence readiness to accept government-sponsored social marketing activities among Australian and Japanese university students aged between 18 and 23 years?
Secondary questions

1. What is the role of readiness to accept government-sponsored social marketing activities in accepting or rejecting social marketing messages sent by government?

2. What are the key elements in operationalising a concept of ‘readiness to accept government-sponsored social marketing activities’? (social marketing activities include social marketing messages as well as advocacy for regulatory and environmental change)

3. How is readiness to accept government-sponsored social marketing activities detected and determined?

4. What are values relating to individual freedom?

5. Are there significant differences in the readiness level of acceptance of social marketing activities among university students aged between 18 and 23 years in Australia and Japan?

   5a Are there significant differences in the readiness level of acceptance of specific government’s social marketing approaches (i.e. education and promotion) among Australian and Japanese university students aged between 18 and 23 years?

   5b Are there significant differences in the readiness level of acceptance of social marketing interventions by government?

6. Are there significant differences in cultural values relating to the freedom of the individual among Australian and Japanese university students aged between 18 and 23 years?

1.5 Overview of Methods

Methods chosen for the present study are detailed in sections 3.1.4, 3.2, and 3.3 of chapter 3. However, in advance, the methods are summarised here for providing readers with a general picture of the current study.
The present study employed ‘Exploratory Sequential Design’ (Creswell & Plano Clark, 2007) procedures to address the aims of the study. The Exploratory Sequential Design is one of the mixed methods where, first, qualitative text data was collected; second, based on the findings of the qualitative study, quantitative numeric data was collected and analysed. In the present study, first, a role of readiness of acceptance in a social marketing context, a concept of readiness to accept government-sponsored social marketing, and a concept of values relating to the freedom of the individual were explored in focus group interviews.

Second, based on the findings from the focus group interviews, these concepts were quantified; the instrument for a questionnaire survey was developed and pilot-studied. The results of the pilot study facilitated: 1) refining the survey instrument; 2) formulating hypothetical relationships among values relating to the freedom of the individual, readiness to accept government’s involvement in social marketing activities, and readiness to accept government’s social marketing approaches; and 3) formulating the hypothesised structural model.

Third, using the refined instrument, the main self-administered-pen-and-paper questionnaire survey was implemented in Australian and Japanese university students aged between 18 and 23 years in Joondalup, Western Australia and Rokkodai, western part of Japan. In order to test the model, the collected data were mainly analysed by exploratory factor analysis and structural equation modelling analysis methods.

Lastly, the results provided from qualitative and quantitative studies were interpreted and discussed taking into account the current situations of government-sponsored social marketing activities in Australian and Japan, which is reviewed in chapter 2.
1.6 Main Contributions

The present study provided two main contributions: theoretical and practical. First, this study contributed to attitudinal and behavioural theories in a social marketing context in four ways:

1. The present study found the ability of readiness to accept government’s social marketing approaches to predict targets’ reaction;
2. The present study explored key elements of readiness to accept government-sponsored social marketing activities for the first time;
3. The present study displayed that cultures were highly influential in formulating its members’ attitudes and behaviours even in a social marketing context; and
4. The present study added importance of value-based attitudinal and behavioural theories into today’s mainstream attitudinal and behavioural theories in a social marketing context.

In addition to these theoretical contributions, the present study also provided the following two practical suggestions:

1. Social marketing practitioners could develop and implement more effective social marketing strategies by measuring representative target audiences’ readiness of acceptance toward possible approaches beforehand; and
2. Taking advantage of relevant values to those who have anti-social attitudes and behaviours, social marketers could take more proactive approaches to them.

These contributions are more fully discussed in section 7.9 of chapter 7.

1.7 Outline of the Thesis

Figure 1.3 depicts an overview of this thesis. As shown in the figure, the present thesis consists of seven chapters and each chapter is related to each other. One-head arrows represent influences of each chapter on other chapter(s); however, these arrows mainly describe chronological influences and all the chapters should be considered mutually affected. Chapter 3, in particular, is the basis of the present study; therefore, it is regarded as the essence of all other chapters.
Chapter 1 has presented a brief introduction to the background of the current study with discussion of four main problems that led the researcher to the present study: 1) government and a nanny-state; 2) values relating to the freedom of the individual; 3) readiness to accept social marketing activities; and 4) cultural values. It has also introduced the aims of the current study, the research questions, and main contributions of this study. Chapter 1 has concluded with the outline of the thesis.

Chapter 2 analyses the existing literature in topics of:

- definitions of social marketing;
- theories of attitude and behaviour change;
- readiness of acceptance;
- freedom;
• values;
• theoretical differences in attitudes towards social marketing activities between Australia and Japan; and
• government-sponsored social marketing activities in Australia and Japan.

These reviews formulate the conceptual and theoretical framework of the present study and justify significance of the study. In addition, chapter 2 provides social marketing contexts that have surrounded the population of this study.

Chapter 3 describes research foundations of the present study, including epistemology, theoretical perspective, methodology, and methods of this study. While a PhD thesis does not necessarily need to include these worldviews, the researcher believed that presenting the researcher’s worldviews would help readers to more fully understand the present study. In the section on research methods, details and rationale of the qualitative and quantitative methods chosen for the present study are discussed.

Chapter 4 reports the focus group interviews that explored key elements of a concept of values relating to the freedom of the individual, readiness to accept government’s involvement in social marketing activities, and readiness to accept government’s social marketing approaches. It includes the procedures for the interviews, the results of the data analysis, interpretations of the results, and hypothetical relationships among the three concepts of interest in this study. This chapter also informs the forthcoming questionnaire development and the main questionnaire survey.

Chapter 5 reports the processes of a measurement instrument for the questionnaire survey of this study, including the pilot study and the finalised instruments for the survey in English and Japanese. This chapter also presents the hypothetical structural model that was tested in the forthcoming main study, expanding the hypothetical relationships among the three concepts, which were formulated based on the findings provided from the focus group interviews.
Chapter 6 reports the process of the main questionnaire survey and the results of the data analyses.

Finally, chapter 7 discusses the results of the main survey, drawing on literature reviewed in chapter 2, relevant information from other chapters, and from other areas. It also presents limitations of the present study, implications of the results for the attitudinal and behavioural theories in a social marketing context and for social marketing practitioners. This chapter concludes with suggestions for the future study efforts.
Chapter 2: LITERATURE ANALYSIS

The present study had three key topics: readiness to accept social marketing activities, values relating to the freedom of the individual and cross-cultural comparison between Australia and Japan. This chapter aims to justify the research approaches to these topics, and the verification of significance of this study through the literature analysis. The analysis is preceded through:

- defining social marketing for this study;
- reviewing literature in theories of attitudes and behaviour change;
- investigating the concept of freedom;
- reviewing the personal values and their measurement scales;
- investigating the likely differences in attitudes towards government-sponsored social marketing activities in Australian and Japanese students based on the exiting literature; and
- understanding government-related social marketing environments in Australia and Japan.

2.1 Social Marketing

2.1.1 What is social marketing?

‘Social marketing’ has been used variously, sometimes negatively or mistakenly (Andreasen, 2002). However, in this study, it can be defined as “the application of
commercial marketing technologies to the analysis, execution, and evaluation of programs designed to influence the voluntary or involuntary behaviour of target audiences in order to improve the welfare of individuals and society” (Donovan & Henley, 2003, p. 6, after Andreasen, 1994). This definition is quite relevant in that it connotes the essences of social marketing: the definition implies a wide-range of applications of social marketing from an individual level to a social level; and the definition differentiates social marketing from traditional social change approaches that have often been confused with social marketing. For example, social marketing used to be, or still is, considered marketing that targets merely individuals (Andreasen, 2006). However, social marketing should encompass broader areas than thought; as rephrased by Donovan and Henley (2003): social marketing is “the application of the market concept, commercial marketing techniques and other social change techniques to achieving individual behaviour changes and societal structural changes…” (p.16). That is, social marketing has the function of solving social issues, focusing not only at an individual level but also at a social level if applied appropriately. To make the most of social marketing, it is also important that it not be confused with traditional social change programs, such as health education, health promotion, or advocacy for legislative and policy change. Andreasen (2002) suggested six benchmarks that distinguish social marketing programs from other social change programs as follows:

1. The goal of social marketing is to change behaviour;
2. Projects are based on audience orientation;
3. The target audience is carefully segmented;
4. The strategic goal is to motivate the target audience to adopt socially desirable behaviours by maximising the attractiveness of doing so;
5. It is not just advertising or communications; social marketing uses a marketing mix: product, price, place, and promotion, for example; and
6. It takes into account threats and weaknesses of the desired behaviour.

However, at the same time, it should be noted that traditional social change approaches can be part of social marketing if they are considered comprehensively and with different emphases to the approaches; whereas each approach cannot be a social marketing program on its own (Donovan & Henley, 2003).
2.1.2 What is not social marketing?

Recent studies have resulted in clarification of social marketing and its benchmarks. However, there remains some ambiguity in its use, and this ambiguity seems to have accounted for many marketing activities being wrongly called social marketing. For example, GLOBIS management School in Japan (2009) gave a smoking manners campaign conducted by Japan Tobacco Inc. (JT) as a good example of social marketing. In the campaign, JT has tried to educate smokers and increase their awareness of good smoking manners through various means including TV commercials, web sites, and posters (see examples in Figure 2.1).

JT has announced that they have initiated the campaign to establish good mutual relationships between smokers and non-smokers in the Japanese society. At first sight, they seem to talk about the good of society; however, clearly, the campaign is not social marketing. The actual purpose of this campaign is to protect the company’s reputation in the society, utilising some parts of social marketing techniques. To avoid this kind of discrepancy, Donovan and Henley (2003) explained social marketing takes place only when:

- It applies target-audience-orientation to its activities, aiming at good of individuals and society;
- It applies commercial marketing techniques to its activities, aiming at the good of individuals and society; and
• It is planned and implemented purely for improving the welfare of individuals and societies.

The first two conditions overlap with the Andreasen’s six benchmarks (2002); however, the last condition sets social marketing against pseudo-social marketing decisively. Comparing the JT’s campaign with these conditions; although the campaign seems to satisfy the first two conditions, it was not planned and implemented purely for improving the welfare of individuals and societies. Hence, the campaign should be called new-generation commercial marketing that borrows techniques from social marketing.

The Chartered Institute of Marketing (2009) has predicted that social marketing is going to have more impact on commercial marketing in future years, because marketing is by nature about changing behaviours and today social marketers are more accomplished in that area than commercial marketers. This suggests that social marketing could become more often confused with commercial marketing that borrows social marketing essence. Dove’s ‘Campaign for real beauty’ (2009) is a successful progenitor of this new type of commercial marketing. The campaign was launched in 2004 to change traditional perceptions of beauty and make more girls and women confident in themselves (see posters in figure 2.2 as examples). This means that Dove attempted to change females’ attitudes towards ‘beauty’, by appealing to their values or norms.

Figure 2.2 Posters made by Dove for its ‘Real beauty campaign’ (Dove, 2009)

Anker and Stead (2009) called the campaign ‘commercial social marketing’. However, again, this study does not regard the campaign as social marketing. This is because the campaign has not been developed purely for the welfare of individuals and societies, not because Dove is a profit-driven organisation. That is, the practice of social marketing
does not rely on whether it is planned and implemented by non-profit or by profit organisations, but relies on how and for what it is planned and implemented.

The previously mentioned confusing of social marketing with other marketing activities can be seen more clearly and more often in Japan. Most of the marketing activities that are called social marketing in Japan can be considered commercial marketing with an emphasis on social responsibilities, like the Dove campaign, or non-profit marketing for managing non-profit organisations. For example, Nomura Research Institute (2004), one of the Japanese leading think tanks, defines social marketing as public-oriented marketing and as an application of commercial marketing techniques to non-profit organisations, including governments, schools, and hospitals. The idea of Japanese social marketing was originally imported from the US; therefore, Japanese so-called social marketing shares the basis of social marketing with them. However, it can be reasonably assumed that that basis has been differently interpreted by Japanese marketers. As a result, the Japanese term ‘social marketing’ has today different meanings from those in Australia, the UK, and the US. Hence, strictly speaking, social marketing as defined in this study has been applied in Japan infrequently. Therefore, it may be inappropriate to link ‘government-sponsored social marketing activities’ to the Japanese Government automatically. However, this study applies the term to both Australian and Japanese Governments for convenience at this point, but the appropriateness is discussed later in this chapter after reviewing their actual activities.

2.2 Readiness of Acceptance

…social marketing is first and foremost about behaviour change. We would simply add that there is a need to ask the question ‘whose behaviour needs changing?’ before we proceed. (Hastings, MacFadyen, & Anderson, 2000, p.9)

2.2.1 Theories of Attitudes and Behaviour Change

Since the Health Belief Model (HBM) (Rosenstock, 1974; Rosenstock et al., 1988) was first introduced to health issues in the 1950s (Janz, Champion, & Strecher, 2002), new theories have led to the development of several models of attitude and behaviour in a
social marketing context. These models have been generally known as the Social Cognition Models (Godin, 1994). The main purpose of the models is to serve as a theory-driven framework, for developing more reliable and effective social marketing strategies (Andreasen, 1997; Elder et al., 1994; Glanz, Lewis, & Rimer, 2002), which conceptualise the effects on behaviours (Donovan & Henley, 2003). Social Cognition Models are conceptually underpinned by the ‘Stimulus-Organism-Response (S-O-R) paradigm’ (Woodworth & Marquis, 1949). The S-O-R paradigm assumes that the stimulus acts on the individual and makes them respond; however, the response varies with individuals and the stimulus because each individual has different senses, beliefs, and emotion (see Figure 2.3).

Each model has informed effective social marketing strategies; however, most of the models overlap conceptually and have demerits too, so that their applications are too limited (Donovan & Henley, 2003). This led to a review and synthesis of the models. At a consensus conference in 1991, six prominent social scientists integrated the major behavioural change models (e.g. the Transtheoretical Model and the Health Belief Model) with eight essential conditions for behavioural change (Chandran, Thesenvitz, & Hershfield, 2004; Fishbein, Triandis, et al., 1991).

Practitioners are far more interested in using the models effectively than in theoretical comparisons of the models (Chandran et al., 2004) and the Health Communication Unit (THCU) at the Centre Health Promotion, University of Toronto, has proposed the eight

![Stimulus-Organism-Response(S-O-R) paradigm](after Woodworth & Marquis, 1949)
conditions to social marketing practitioners as “one excellent example of a user-friendly behaviour change framework” (Chandran et al., 2004, p.1). The eight conditions distilled from the mainstream models by Fishbein, Triandis, Kanfer, Becker, Middlestadt, and Eichler (1991) as conditions where a person is more likely to perform a given behaviour are if:

1. The person has a positive intention to perform the behaviour. Strong intention exists when a person believes that they are at high risk from a certain problem, that the consequences of the problem are severe, and that the given behaviours will reduce the risk or protect against it;

2. There are no environmental constraints that prevent the behaviour from occurring;

3. The person has the knowledge and skills to perform the behaviours,

4. The person weighs the pros of the behaviour more than the cons. In other words, if a person values the consequences of performing a given behaviour more than not performing the behaviour, they tend to carry out the behaviour;

5. The person feels more social pressure from those who matter to them to perform rather than not perform the behaviour;

6. The person recognises that the behaviour agrees with their self-image and personal standards;

7. The person is emotionally positive about performing the behaviour; and

8. The person is confident enough to perform the behaviour under any conditions.

Generally it is now considered that ‘intention to perform a desired behaviour’, ‘no environmental constraints against a desired behavior’, and ‘skills for a desired behaviour’ are prerequisite and sufficient conditions for the behaviour to occur (Chandran et al., 2004; Elder et al., 1994; Fishbein, Triandis, et al., 1991).

2.2.2 Readiness to Accept Social Marketing Activities

Existing Social Cognition Models and theories have been improved through integration, depending on which concepts are suited to given behaviours (Donovan & Henley, 2003). They have contributed to more effective planning and implementing of social marketing
activities. However, in reality, situations that are not explained by the models and theories can still be seen. For example, the models and theories have not explicitly explained why some people who want to break their habit of smoking may be less likely to quit when told to give up smoking by someone else. In addition, why some people who know the injury risks of no-helmet on a bike may refuse to wear it when told to do so by others? The models and theories seemed to overlook something important. In the advertising literature, Diehl, Mueller, and Terlutter (2008) empirically proved that consumers accepted an advertising activity in general and an advertising message separately. Thus, it was reasonably assumed that people have different perceptions towards a social marketing message (or a recommended behaviour) and towards social marketing activities (or social change directives using social marketing activities/techniques). That is, quitting smoking would be different from an instruction on quit smoking by someone else. Accordingly, the researcher of this study speculated that an individual’s predisposition towards social marketing activities would be dependent on the person’s readiness to accept social marketing activities and would affect the person’s attitude and behaviour to a social marketing message. Figure 2.4 suggests that an individual’s readiness to accept social marketing activities can be incorporated into the Stimulus-Organism-Response (S-O-R) paradigm on which the Social Cognition Models and theories have been based. Proposed diagrams show that a factor of readiness to accept social marketing activities could enable the existing models and theories to explain such behaviour as accepts an idea of recycle (message), but disagrees with government interventions in recycling (activity). As mentioned in chapter 1, people would pay little attention to any social marketing messages or approaches that exceeds their readiness level of acceptance.
Figure 2.4 Diagrams proposing three possibilities for the relationships between readiness to accept social marketing activities and responses to message (content)
2.3 Freedom

Stone walls do not a prison make, Nor iron bars a cage;
Mindes innocent and quiet take, That for an hermitage;
If I have freedom in my love, And in my soule am free;
Angels alone that sore above, Injoy such liberty

(from ‘To Althea. From Prison’ by Richard Lovelace)

2.3.1 Freedom and social marketing

Why do some people mind being told what to do or not to do, while others do not? What determines the level of readiness? The answer to these questions was found in health promotion literature in the discussion of ‘freedom’. In 1980, Baker (1980) criticised conflicts between individual freedom and the public good, saying:

Freedom not to wear a helmet. Freedom to have a handgun. Freedom to choose unsafe products. Each of these “freedoms” is extolled by special interest groups in pursuit of their own objectives. They ignore the fact that each would entail important losses of other people’s freedoms. It is long past time for public health professionals to put a stop to these losses, especially when freedom from injury and disease is being sacrificed. (p.574)

However, Perkins (1981) strongly objected Baker’s assertion in that what she said could be considered “unwarranted institutional infringements on personal prerogatives” (p.294) in the name of public good. Baker and Teret (1981) instantly responded to Perkins as “…we are faced with more difficult task of incorporating societal concerns…, and a significant population burden can outweigh an individual’s freedom” (p.296). The debates were discussed by academics in the health promotion nearly 30 years ago. However, considering that the tensions between freedom and the public good has still continued (Bayer, 2007; Jones & Bayer, 2007), their different views of the freedom could be replaced with today’s social marketing receivers; that is, ordinary people. Therefore, it can be assumed that those who highly regard individual freedom would tend to refuse being told what to do or not to do and those who regard public good more than individual
freedom would tend to be aware of and adopt the recommended behaviours. Social marketing today covers more difficult and complex issues, many of the social marketing messages became ‘a hard-to-swallow’ (Jack, Bouck, Beynon, Ciliska, & Mitchell, 2005), and the role of advocating for laws and regulations has become more important (Andreasen, 2006). Under those circumstances, understanding influences of individual perceptions of freedom on their readiness to accept social marketing activities seemed even more important. Henley (2006) discussed the possible effect of freedom on social marketing in her article “Free to be obese in a ‘Super Nanny State’?” which concluded that if social marketing is well planned and implemented, it can create a ‘super nanny state’ where “people are empowered to make healthier decisions” (p.2). If the relationships between freedom and the individual’s readiness can be understood, it could contribute significantly to planning and implementing social marketing that can empower people to make better decisions. Furthermore, this could provide social marketing theorists and practitioners with a new approach to attitudes and behaviours change.

The meanings of freedom have been interpreted differently (Benn, 1988), but may be summarised as;

1. “the right to do what you want without being controlled or restricted by anyone”;

2. “the state of being free and allowed to do what you want”; and

3. “the state of being free because you are not in prison” (Longman, 1998).

The Universal Declaration of Human Rights adapted by the United Nations in 1948 clearly proclaimed that for human beings “freedom of speech and belief and freedom from fear and want” are among the highest aspirations and they must be protected (The United Nations, 1948). Today, freedom is a fundamental human right for all people despite being compromised in many countries. However, why is freedom so important for human beings? This might be because human freedom has often been jeopardised, sometimes in the name of achieving peace and justice. The following history of freedom explains this fact very well. In his publication; “Leviathan” (Hobbes, 1651/1996), Thomas Hobbes considered that human beings are hostile to one another by nature, because of three principles of causing discord: “competition, difference, and glory” (p. 83). A man invades others for gain (competition), for safety (difference), and for reputation (glory). He called society the place for “a war of every man against every man”
Hobbes developed the theory that peace could be achieved only when it is enforced by power or authority. In other words, human beings have to exchange their freedom for peace. Laws can keep order in society, but to retain this order, human beings have to accede to the laws. Hobbes’s theory was based on the ‘absolute monarchy’ (Lowe, 2005), which involved deprivation of individual’s freedom. Conversely, John Locke (1690/1924), an English philosopher in the 17th century, advocated that human beings should not be controlled by power but by reason, and emphasised the importance of self-regulation. Although he agreed with Hobbes that relationships between citizens and government should be based on consent, Locke argued that civil government can use its power only if its people allow it to do so, believing that individuals alone can authorise the right to rule. For Locke, no one can rule or invade individual freedom and self-regulation is the only way of being free from human hostilities (Lowe, 2005). His theory significantly influenced many philosophers, and made them aware of the importance of human freedom. This is reflected in the Constitution of the United States of America. The importance of individual freedom was even more strongly emphasised by John Stuart Mill, the 19th century thinker. He developed the harm principle in his book “On liberty” (1859/1975), saying that each individual has the right to act as he/she wants, as long as those actions do not infringe others’ rights. Like Locke, Mill also supported limited power for government; however, unlike Locke, he firmly insisted that freedom is a necessity for human beings’ progression (Mill, 1859/1975). Accordingly, human beings can make progress only when they are given the freedoms of speech, thoughts, and actions. Those people who support Mill are often called ‘libertarian’ today (Haworth, 1994).

Isaiah Berlin (1969) classified freedom into two different concepts: negative and positive freedoms. Negative freedom can be regarded as opportunities not to be interfered with. For example, ‘freedom from’ restrictions, power, or oppression are negative freedoms, while positive freedom is a matter of whether you are capable to be free; i.e. ‘freedom to’ involves ability, environment, and substantial resources needed for freedom. Berlin argued that Mill’s view on freedom is biased towards negative freedom; however, in reality, negative freedom cannot be separated from positive freedom. Therefore, both of the concepts of positive and negative freedom explain what freedom is; however, they sometimes conflict. A dictator controls and represses its people for their positive freedom, but the people’s fight against them is an action of negative freedom. Addressing this paradox, Nozick (1974) stated that nobody can invade others’ freedom for their own
freedom. Regardless of the range of theories on freedom, a common principle should be to maximise the benefits of freedom for all human beings and to minimise the risk of freedom being misused. Considering the historical background of freedom, it seems reasonable that some people have ill feeling towards being told what to do or not to do because they may consider this as an invasion of freedom. However, does social marketing infringe individual freedom or does it protect individual freedom from being infringed by others? This could be dependent on individual perceptions of freedom.

2.3.2 Freedom in Australia and Japan

The world has never had a good definition of the word liberty.

(Abraham Lincoln)

Although freedom should be a very important concept for human beings, the previous reviews of freedom are limited to Western concepts. Therefore, people with non-western concepts might have different perceptions of freedom and might not value the importance of being free like Westerners including Australians. In fact, Wierzbicka’s (1997) linguistic study found conceptual differences in the word ‘freedom’ among Latin, English, Russian, Polish, and Japanese. She concluded that freedom is a cultural-specific concept, and different cultures have different attitudes and behaviours towards freedom. Below, Australian and Japanese concepts of freedom are considered.

Freedom in Australia

Wierzbicka’s study was based on language, but not on countries. However, because English is the Australian official language and because Australia, the United States, Canada, Great Britain, Ireland, and New Zealand, where English is mainly spoken, showed similar perceptions of values and belonged to the same hierarchical cluster (see Hofstede, 2001 Exhibit 2.8.), her analysis of ‘freedom in English’ could be expected to describe some Australian concepts of freedom. In modern English, meanings of concepts of freedom can be expressed as follows (Wierzbicka, 1997, p.130).

“(a) someone (X) can think something like this:

(b) if I want to do something I can do it

(c) no one else can say to me: “you can’t do it because I don’t want this”
if I don’t want to do something I don’t have to do it

no one else can say to me: “you have to do it because I want this”

this is good for X

it is bad if someone cannot think this”

Compared with other languages, she characterised the concept of freedom in English by its notion of non-intervention. This “absence of interference” (Pettit, 1997) notion could not be found in Latin. Livertas, ‘freedom’ in Latin, did not include the components of other people; the concept of freedom in Latin did not embrace notions such as “you have to do it because I want this”. From this, it was assumed that for Australians, not being told to do or not being told not to do is also as important as doing what they want to do.

**Freedom in Japan**

While making a decision ‘to do what I want’ or ‘not to do what I don’t want’ without any interference, seems an ideal for freedom in the English-speaking world including Australia, that ideal did not seem to sit well with Japanese (Wierzbicka, 1997). Actually, freedom or jiyū in Japanese not only had positive meanings as in English, but also negative (Doi, 1981). Although Western culture has penetrated Japanese society, and younger generations, in particular, have been westernised (Goy-Yamamoto, 2004), many Japanese, including the researcher herself, still see the making of a decision without considering others as a selfish attitude that is disturbing to social harmony, or “wa” (Nakane, 1973, p.49) in Japanese. This may have resulted from differences in social backgrounds. In English, the concept of freedom originated from the liberation from coercion; that is freedom has always been essential to human rights and dignity (Doi, 1981). However, Japanese jiyū or freedom originally does not have those concepts at all, because for many Japanese “the harmonious integration (wa) of group members” (Nakane, 1973, p.49) is as valuable as individual rights and dignity for those in the English-speaking world. A study of cultural values of Australian and Japanese workers also supported this fact, showing that Japanese respondents working for Japanese companies within Japan regarded ‘warm relationships’ as the most important value (Soutar, Grainger, & Hedges, 1999). This Japanese value is based on the precept of reciprocal support within certain groups and has long been considered a virtue in Japan.
(Nakane, 1973), as reflected in Article One of the Seventeen Article Constitutions; the Japanese first constitution established by Prince Shōtoku in the seventh century (Kodansha International, 1996). Freedom is, of course, important for Japanese as well as for those in the English-speaking world; however, it should be noted that ‘independence’ and ‘autonomy’ which are the main western perceptions of freedom sometimes negatively sound like; loneliness, for example, to many Japanese (White, 1987). It has been tacitly believed that individual freedom should be achieved within maintaining social harmony (Nakane, 1973).

2.4 Values

Freedom is a value (Rokeach, 1967), and like other values, such as equality and happiness, is “an integral and daily part of our lives”. Values “determine, regulate, and modify relations between individuals, organizations, institutions, and societies” (Agle & Caldwell, 1999, p.327).

2.4.1 Definition of values

Definitions of values vary by discipline. For example, Thomas and Zaraniecki (cited in Vinson et al., 1977) are anthropologists and defined values as “… objective, social elements which impose themselves upon the individual as a given and provoke his reaction” (p.44). Bronowski (cited in Vinson et al., 1977), a sociologist, suggested that values are “a concept which groups together some modes of behavior in our society” (p.44), and Rokeach (1973), a psychologist, expressed values as “an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode” (p.5). However, a close examination of different definitions revealed that they were usually contradictory, but in essence shared a common concept of values. Hence, it seemed pointless to argue which definition was the most suitable in a social marketing context. On the contrary, as social marketing has broadened its working fields, modern social marketing requires multidisciplinary knowledge including anthropological, sociological, psychological and even philosophical sources (Andreasen, 2006); therefore, a definition of values in a social marketing context should reflect a cross-discipline standpoint. Synthesising the existing definitions based on a
multidisciplinary viewpoint, values were defined as ‘guiding principles that lead people and society to certain attitudes, behaviours or life styles’ in this study.

### 2.4.2 Functions of values

Values play a precedent role for attitudes and behaviours (England et al., 1974; Maio & Olson, 1998; Rokeach, 1973). An attitude can be described as “a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner” (Rokeach, 1976). Behaviour is “a function of the interaction between two attitudes— attitude-toward-object and attitude-toward-situation” (Oxford University Press, 2000) and “the way a person, an animal, a plant, a chemical, etc. behaves or functions in a particular situation” (Rokeach, 1976, pp.127-128). Stated quite simply, behaviours are actions and reactions towards something or someone in a specific environment. Values are a predictor for those attitudes and behaviours. The relationships among them can be summarised as seen in Figure 2.5.

![Figure 2.5 Schematic relationships among values, attitudes, and behaviours after Rokeach (Ishikawa, 2009; 1967, 1968, 1973)](image)

These relationships have been empirically examined and supported by researchers in business marketing, management, psychology and sociology (Agie & Caldwell, 1999; De Pelsmacker et al., 2005). For example, the structural equation test of the value-attitude-behaviour hierarchy (Homer & Kahle, 1988) confirmed that values were related to nutritional attitudes and food shopping behaviours, and that nutritional attitudes significantly affected food shopping behaviours. Although Maio and Olson (1994) disagreed with Homer and Kahle in that predictive ability of values for behaviours is weaker than for attitudes, values-attitudes-behaviours relationships were also verified in attitudes and behaviours about a dance to support the construction of an enclosed on-campus smoking area (Maio & Olson, 1994). Such relationships have been also found
in attitudes and behaviours relating to social issues. For example, Nordlund and Garvill (2002) showed that general values affected environmental values, problem awareness, and the personal norm, and that the personal norm influenced environmental behaviours. Goff and Goddard (1999) supported the predictable ability of values for adolescent problem behaviours, such as delinquency, substance use, and sexual activity. They divided the respondents into nine groups based on their most important value, and through analysis of variance (ANOVA) they found relationships between the core values and respondents’ problem behaviours. Another example is a study about values and their relationships to HIV/AIDS risk behaviour among late-adolescent and young adult college students (Chernoff & Davison, 1999). Their factor analysis revealed that ‘exciting-life’ was strongly associated with HIV/AIDS high risk behaviours, and ‘self-controlled’, ‘helpful’, ‘honest’, ‘loving’, ‘equality’, and ‘a world at peace’ were significantly associated with lower HIV/AIDS risk behaviours. As seen in those examples, values are useful for predicting attitudes and behaviours. However, as attitudes and behaviours relating to social issues have relied heavily on social cognition models and theories, discussion about values in a social marketing context has been limited, and the importance of values has been underestimated (Kristiansen, 1985).

2.4.3 Measurements of values related to the freedom of the individual

When values are empirically studied, it becomes important to consider how to measure them. Values have commonly been measured by Values and Life Style (VALS) (Mitchell, 1983), List of Values (LOV) (Kahle & Kennedy, 1989), Portrait Values Questionnaire (PVQ) (Schwartz et al., 2001), and Rokeach Value Survey (RVS) (Rokeach, 1967). Through the investigation of these measurements, RVS appeared the most applicable measurement at the stage of study proposal because:

1. RVS uses the term ‘freedom’ while VALS, LOV, and PVQ do not;
2. RVS is the most flexible in modification. The original RVS consists of 18 instrumental and 18 terminal values; however, modified versions of RVS have been widely used by adding relevant values in question;
3. RVS is the most flexible in a measurement method. Although the original RVS uses ranking measurement, reliability and validity of rating measurement have been also verified and used widely (see McCarty & Shrum, 2000; Munson & McIntyre, 1979);
4. RVS has been recognised as a useful measurement for languages other than English. The stability of the results of Rokeach Value Survey in different cultures has been confirmed (see Lenartowicz, Johnson, & White, 2003; Murphy & Anderson, 2003; Rokeach & Ball-Rokeach, 1989). While PVQ has been widely used for cultural comparison study (Agle & Caldwell, 1999), it seemed more difficult to translate PVQ’s textual portraits of 40 different people from English to other languages, without losing the original context, than values on the list of RVS; and

5. RVS has been used in the health promotion. For example, Kristiansen (1985) used RVS to examine the relationships between values and preventative health behaviour. Correlation and regression analysis showed that Rokeach’s terminal values associated well with preventative health behaviours. Chernoff and Davision (1999) used RVS to study the influence of values on HIV/AIDS risk behaviour among late-adolescent and young adult college students.

However, focus group interviews, which were conducted as an antecedent exploratory research for a sequential quantitative research in this study, confirmed that Australian and Japanese students defined concepts of the term ‘freedom’ differently as suggested by Wierzbicka (1997), Doi (1981), and Nakane (1973). This fact suggested that not only VALS, LOV, or PVQ, but also RVS would not provide an appropriate measurement for comparison between Australian and Japanese values relating to the freedom of the individual. Accordingly, the researcher identified the need to provide a tailor measurement for values, based on the previous studies and findings of the focus group interviews.

2.5 Theoretical Differences in Attitudes towards Social Marketing Activities

The differences in attitudes towards being told what to do and not to do between Australians and Japanese are briefly discussed with relation to perceptions of freedom in the ‘Freedom’ section, based on knowledge from literature. This discussion could be expanded further by taking into account; 1) cultural characteristics by nation identified by Ng et al. (1980-1981) and Hofstede (2001), in addition to previously-mentioned Wierzbicka (1997); and 2) cultural characteristics by generation.
2.5.1 Theoretical differences in attitudes based on cultural characteristics

Ng et al. (1980-1981) collected human value data rated by the respondents from 10 different regions of nine different countries (Bangladesh, India, Taiwan, New Zealand, Tasmania, Hong Kong, Papua Niugini, Chines Malaysian, Malay, and Japan), using a modified version of Rokeach Value Survey (RVS) that included additional four values. Based on the data, they found four dimensions that they believed could differentiate each culture. The four dimensions were (1) “Societal-oriented values which emphasize the submission of self to a hierarchical society (Obedient, Polite) and the country (National Security)”, (2) “Self-oriented with a strong Dionysian tendency” (Mature Love and Exciting Life), (3) “Self-oriented values which emphasize the cultivation of inner strength” (Self-Respect, Inner Harmony and Capable), and (4) “Materialistic-oriented values (Comfortable-life and Equity)” (p.200). Reliability and credibility of these dimensions were re-analysed by Hofstede and Bond (1984) and they were concluded to be consistent with Hofstede’s cultural dimensions. They distinguished Australians (Tasmanians in the study) by Dionysian self-oriented values such as ‘Mature love’ and ‘Exciting Life’ and Japanese were differentiated from other countries by its materialistic-oriented values including ‘Comfortable life’ and ‘Equity’. As already mentioned in the previous section, differences in perceptions of freedom between Australians and Japanese were pointed out by Wierzbicka (1997): freedom has positive meanings and is very important for Australians, while Japanese see freedom both positively and negatively because freedom does not necessarily match with Japanese key value ‘group harmony’. Hofstede (2001) conducted large-scale surveys through more than 50 countries longitudinally in 1968 and 1972. Through the data analysis, he found cultural characteristics of each country through five dimensions including ‘Power Distance’, ‘Uncertainty Avoidance’, ‘Individualism and Collectivism’, ‘Masculinity and Femininity’ and ‘Long-versus-Short-Term Orientation’ that he suggested could compare and differentiate cultures. His work practically and academically made a large contribution towards cultural comparisons and the cultural characteristics have been widely applied to understand the differences in attitudes, behaviours, and values in different cultures (Sondergaard, 1994). The following is a brief explanation of the five dimensions and Australian and Japanese cultural characteristics identified by Hofstede (2001).
• Power distance refers to “the degree of inequality in power between a less powerful Individual (I) and a more powerful Other (O), in which I and O belong to the same (loosely or tightly knit) social system” (Mulder cited in Hofstede, 2001, p.83). Australia and Japan showed low power distance and high power distance respectively;

• Uncertainty avoidance means the degree of motivation to avoid ambiguity. Cultures with strong uncertainty avoidance have strong anxiety for future or change. They consider rules and regulations important and they believe the rules and regulations should never been broken so that social stability could be kept. However, cultures with low uncertainty avoidance have less anxiety for future and more focus on inner minds. Australia was positioned in a low uncertainty avoidance culture and Japan was classified into a high uncertainty avoidance culture;

• In the third dimension, Australia occupied individualism and Japan was differentiated by collectivism, while both countries labelled as a masculine society in the fourth dimension; and

• The last dimension was called ‘Long-versus-Short orientation’. Australia was categorised as short-term orientation which expects quick results and respects traditions, and for which status is not major issue in relationships. However, Japan in a long-term orientation dimension would be persistence and perseverance, but good at adapting traditions to new circumstances. For Japanese, relationships would be determined by status and observed orders.

Table 2.1 summarises the above-mentioned Australian and Japanese cultural characteristics. While there has been several criticisms about the validity of the data, saying they are obsolete (e.g. McSweeney, 2002), considering the fact that human values need almost a century to change at a cultural level (Hofstede, 2001), it could be reasonably assumed that those characteristics are still valid today.
Table 2.1
Summary of Cultural Characteristics of Australia and Japan (after Hofstede, 2001; Ng et al., 1980-1981; Wierzbicka, 1997)

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ng’s cultural characteristics (1980-1981)</td>
<td>• Dionysian self-oriented values (Mature Love, Exciting Life)</td>
<td>• Materialistic-oriented values (Comfortable-life, Equity)</td>
</tr>
<tr>
<td>Wierzbicka’s concepts of freedom (1997)</td>
<td>• Freedom is very important for life</td>
<td>• Freedom is important, but less important than integrated harmony of group members</td>
</tr>
<tr>
<td>Hofstede’s cultural characteristics (2001)</td>
<td>• Low interpersonal power or influence between authority and me</td>
<td>• High interpersonal power or influence between authority and me</td>
</tr>
<tr>
<td></td>
<td>• Weak motivation to avoid ambiguity</td>
<td>• Strong motivation to avoid ambiguity</td>
</tr>
<tr>
<td></td>
<td>• Individualism</td>
<td>• Collectivism</td>
</tr>
<tr>
<td></td>
<td>• Masculine</td>
<td>• Masculine</td>
</tr>
<tr>
<td></td>
<td>• Short-term orientation</td>
<td>• Long-term orientation</td>
</tr>
</tbody>
</table>

Applied to a social marketing context, the cultural characteristics suggested high possibilities of differences in Australians and Japanese attitudes towards government-sponsored social marketing activities. If Australians consider the government trying to control people and force them to do what the government wants them to do, they would harbour ill feeling towards the government-sponsored social marketing activities, because they believe that government and its people should have equal power and nobody can tell people what to do or not to do. However, no matter what the government says, Japanese would be more obedient to the government as they take it for granted that the government has the right to control society as long as the government aims to facilitate social harmony.

2.5.2 Theoretical differences in attitudes based on cultural characteristics of generation

“A generation refers to a cohort of people, born within a span of time in which the trends, technologies, and events have significantly shaped them” (McCrindle Research, 2008). It
has been deemed that each generation has unique characteristics and these characteristics have helped researchers and marketers understand attitudes and behaviours of their subjects or target segments (e.g., Japan Consumer Marketing Research Institute, 2006; Neuborne & Kerwin, 1999). Characteristics based on generation do not require up-to-dateness; hence, it was expected that the cultural characteristics reviewed in the previous section would be supplemented by taking into account generation. The target population of this study, university students aged between 18 and 23 years born between 1985 and 1990, were classified into the ‘Generation Y’ (McCrindle Research, 2008) in Australia and ‘the New Breed of People, Jr.’ (Japan Consumer Marketing Research Institute, 2006) in Japan. Table 2.2 shows summarised characteristics of the Generation Yers and the New Breed of People, Jr.s. It could be interpreted that freedom is still important for Australian Generation Yers as fun and spiritual meaning weigh with them. This view appeared individualistic, and it implied that they do not like to be told what to do or not to do. This attitude could be also explained by their scepticism towards advertisements, and social marketing advertisements may be no exception. However, at the same time, the Generation Yers regard the importance of community values and consensus for their decision making. At first sight, these attitudes seemed inconsistent; however, that may be the reason why the Generation Yers are called pragmatists. The New Breed of People, Jr.s in Japan were expected to be always ready to accept social marketing activities as they highly regard social norms (Nihon Keizai Shinbun, 2006). However, this did not necessarily mean that the New Breed of People, Jr.s would be willing to sacrifice their freedom for social welfare, but they probably try to conform to social norm, which believes that achieving social welfare would be more beneficial for them than pursuing individual freedom.
Summary of Characteristics of Generation Y in Australia and the New Breed of People, Jr. in Japan (after Japan Consumer Marketing Research Institute, 2006; McCrindle, 2002; Nihon Keizai Shinbun, 2006) * as of 2006

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Generation Y</th>
<th>The New Breed of People, Jr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (* of Pop'n)*</td>
<td>4.7 m (20.5%)</td>
<td>12.6 m (9.9%)</td>
</tr>
</tbody>
</table>

- Influenced by peers for decision making the most
- Loyalty to their peers
- Respect community values and consensus in the community more than single decision based on their own values
- Pragmatism and short-term focus
- Scepticism towards advertisement
- Fun, friendship, achievement, and spiritual meaning are important for their lives.
- Emphasis on ‘a happy relationship’ and ‘a loving family’

- Close to their parents
- Not too close relationship with friends
- High adaptability to social norms
- Cool adapters and long-term focus
- Belief in word-of-mouth
- Fun and achievement are not so important
- Emphasis on ‘working hard and pursuing favourite things’ and ‘a loving family’

2.6 Social Marketing Environment

It is important to understand social marketing environments to which university students have been exposed in Australia and Japan. This is because understanding those environments could profile the students’ current attitudes and behaviours towards government-sponsored social marketing activities. This section first reports governments’ current approaches towards social issues in Australia and Japan, based on analyses of the information provided by the governments, relevant institutions, and other parties about current social marketing environments, and second deduces the people’s general attitudes towards government-sponsored social marketing approaches discussing the social marketing environment based on the reviews of the campaigns in Australia and Japan. The environment is discussed, referring to the benchmarks and the definition (see section 2.1.1 for details), and government’s approaches in campaigns. To describe the governments’ emphases to their different approaches more lucidly, the approaches are
simplified as (a) education, (b) promotion, and (c) paternalism, based on the three strategic social change tools presented by Rothschild (1999) in the following sections. In education, governments give relevant information to their audiences, but leave them to make their own informed choice about their behaviours. In promotion, governments encourage their audiences to adopt socially desirable behaviours, providing not only information but also relevant products and services. In paternalism, governments force their audiences to adopt socially desirable behaviours through punishments like fines and imprisonment. The current study equates the Australian Government to the federal government and the Japanese Government to the national government so that the information from the two countries could be equalised at the same administration levels.

2.6.1 Government-sponsored Social Marketing Campaigns

Six actual government-sponsored or government-conducted campaigns for solving social issues in Australia and Japan are briefly reported below. To make the information comparable, the campaigns were chosen based on three common issues: health, environment, and road safety. In addition, it is observed that there is no major difference between Australian and Japanese societies of people’s familiarity with these issues.

2.6.1a Healthy eating

‘Go for 2&5®’ campaign in Australia

In 2005, the Australian Government started a A$4.76 million ‘Go for 2 & 5®’ campaign to address overweight and obesity in the Australian population (Australian Government Department of Health and Ageing, 2007). The main message of this campaign was a recommendation to eat 2 serves of fruits and 5 serves of vegetables per day, targeting parents and carers of children and youth (aged 0 –17 years), children aged between 5 and 12 years, and youth aged between 13 and 17 years. The campaign included multiple strategies:

- TV–three 30–second ads ran for 10 weeks on channels Seven, Nine, Ten, SBS, ABC and Pay TV;
- Magazines–full colour ads targeted grocery buyers with children (see figure 2.6 for the popular campaign character ‘Veggie man’);
Radio-ads were broadcast in 10 languages: Chinese, Indonesian, Vietnamese, Korean, Japanese, Farsi, Arabic, Russian, Turkish and Khmer;

There was point-of-sale promotions in shopping centres (shop panels and shopping trolleys);

There was online advertising; and

There were publications—consumer booklet, poster, and recipe cards.

Figure 2.6 ‘Veggie man’, a main character of ‘Go for 2 &5®’ campaign (Australian Government State and Territory health initiative, 2009)

The campaign was planned and implemented, taking into account various factors: supply, cost and quality of fruits and vegetables; and individual demographic factors - attitudes, beliefs and behaviours - which influences fruit and vegetable intake (Australian Government State and Territory health initiative, 2009). To deal with these factors, the government designed a collaborative approach to increase fruit and vegetable consumption with state governments and private organisations. In 2007, Woolcott Research (2007) reported the evaluation results of the national ‘Go for 2&5®’ campaign to the Australian Government Department of Health and Ageing. According to the report, the campaign succeeded in generating awareness of the importance of more fruit and vegetable intake; however, it concluded that the campaign would need more time to change behaviours.

‘Shokuiku (Food Education)’ campaign in Japan

In 2005 the Japanese Government enacted ‘The Basic Law on Shokuiku (Food education) to address food–related social problems, such as obesity, an excessive desire for being slim among young females, and loss of traditional food culture (Ministry of Agriculture
Forestry and Fisheries, 2005). The Shokuiku law defines Shokuiku as “acquisition of knowledge about food as well as the ability to make appropriate food choices” (p.1). In the report What is “Shokuiku (Food Education)”? (Ministry of Agriculture Forestry and Fisheries, 2005), the Japanese Government emphasised that the ‘Shokuiku’ campaign is unique in that, unlike most Western food-related campaigns, it is based on nutritious aspects and also food safety and food cultural aspects. Coincidentally, The Australian Guide to Healthy Eating (Smith, Kellett, & Schmerlaib, 1998) on which the Australian Go for 2&5® campaign was based stated “food is not just a source of nutrients. It is important for good social and emotional health as well as physical health. Food and eating are part of the way people live their lives” (p1). Therefore, the Go for 2&5® and the Shokuiku campaigns were similar in their basic concepts; however, the Japanese Government chose a different approach to the campaign: a paternalistic approach that enacted a new law, though the law did not inflict any punishments. The Japanese Government itself admitted that the government should not regulate personal choices like eating by a law (Ministry of Agriculture Forestry and Fisheries, 2005); however, it confirmed that a law had to be established because the Japanese situations surrounding food and eating were in crisis.

The Shokuiku campaign mainly targeted children; however, it did not clearly segment them based on age or school. The campaign included these strategies:

- Shokuiku Fair (Japanese food education fair);
- nationwide symposiums;
- awards to outstanding Shokuiku activities through “Shokuiku Local Activities’ competition”;
- establishment of the “The Japanese Food Guide Spinning Top (The Japanese Food Guide ST)” (see figure 2.7 for the details of the spinning top); and

The Japanese Government proclaimed that the Shokuiku campaign would succeed only when individuals take actions (Ministry of Agriculture Forestry and Fisheries, 2005); however, they aimed to achieve this goal through a top-down approach. This top-down approach is well explained by the Japanese Food Guide ST and assignments of full-time
diet and nutrition teachers. The Japanese Food Guide ST was established in 2005 and it has been used as one of the major Shokuiku materials. However, as seen in the figure 2.7, this material was not developed directly for children, but for those who would educate children like diet and nutrition teachers whom Ministry of Education, Culture, Sports, Science and Technology trained and assigned at public elementary and junior high schools (equivalent to Australian Year1 to Year9 schools). That is, the government instructed those who educate (or instruct) children, and the educators educate (or instruct) the children. However, this structure seemed to change. According to an Assessment Report released in July, 2009 (Ministry of Agriculture Forestry and Fisheries, 2009), the Shokuiku campaign did not achieve its goal in the 2008 fiscal year (from April 2008 to March 2009), which had continued from previous years. The ministry then decided to change its top-down instructive approach into a promotional approach that encourages people to learn relevant skills and knowledge to adopt the desired behaviour in the 2010 fiscal year (from April 2010 to March 2011).

**Figure 2.7** Japanese food guide spinning top (Ministry of Agriculture Forestry and Fisheries, 2005, p. 7)
2.6.1b Waste reduction: the 3Rs (reduce, reuse and recycle)

‘LivingGreener.gov.au’ in Australia

In August 2009 the Australian Government provided information about how to reduce, reuse and recycle wastes, which has been known as the ‘3Rs’ in the world, launching its web portal ‘LivingGreener.GOVT.AU’ (Australian Government, 2009b) (see figure 2.8 for a logo of the web portal).

![Logo of LivingGreener.gov.au](https://example.com/logo.png)

Figure 2.8 Logo of LivingGreener.gov.au (Australian Government, 2009b)

This web portal was developed to encourage individual Australians to adopt environmentally friendly behaviour, by providing relevant information and preparing appropriate external conditions to facilitate the desired behaviour (Department of the Environment Water Heritage and the Arts, 2009). One of the unique aspects of this site is the different stages of householders’ desire for information: 1) if audiences need just information about recycling, they could select ‘Be informed’ and get general information about the issue; 2) if they want to know about government assistance, they click ‘Rebates and grants’; and 3) if they want to perform recycling, they could find more practical information including the 3Rs in ‘Take action’ pages. The three different stages are linked with each other so that it is easy to jump from one stage to another. This approach corresponds with social marketing strategies for smokers in different stages of change (Dijkstra, Roijackers, & De Vries, 1998), and the adoption of the stages helps segment the target audiences into adjusted information. In the contents of the 3Rs (in the action stage), the department gives practical information and suggestions how to perform the 3Rs, adding two more Rs, ‘Rethink’ (the amount and type of waste you create) and ‘Refuse’ (things you do not need, plastic bags for example). Hence, for someone who wants to perform the 3Rs but does not know how to do so, the page can be a recipe of the 3Rs.
The Australian Government’s intensive efforts towards waste reduction have only just begun; it plans further development of the portal and a national waste policy (The Allen Consulting Group, 2009). Therefore, no evaluation for the activities has been done yet.

‘3R’ campaign in Japan

The 3Rs campaign is called ‘3R’ in Japan, where the three English words ‘reduce’, ‘reuse’, and ‘recycle’ have been adopted with the Japanese representations. The 3R is based on the idea that the country should aim to achieve a sound material–cycle society with a good balance between environment and economy. In Japan, the Ministry of Economy, Trade and Industry is responsible for the 3R as well as Ministry of the Environment. The Japanese Government enacted the Fundamental Law for Establishing a Sound Material–Cycle Society in 2000 and implemented 3R to achieve the sound material–cycle society (Ministry of Economy Trade and Industry, 2009). Since then, the Japanese Government has promoted 3R in various ways including:

- ‘3R Month’ (3R promotion month) in October;
- TV ads;
- magazine ads;
- newspaper ads;
- ‘Eco Town’ projects in which the government supports local authorities to establish the sound material–cycle society, using uniqueness of their local industries;
- 3R awards;
- creation of ‘3R logo’ in 2004 to publicise 3R (see figure 2.9 for the logo);
- environment manager training workshops; and
- delegation of environment managers to schools, local governments and business organisations.

Figure 2.9 Logo of 3R (Ministry of the Environment, 2009)
Through these activities, the Japanese Government has attempted to increase people’s awareness of 3R and to provide practical information on how to do 3Rs practically. In addition to the fundamental law, the government also enacted the Container and Packaging Recycling Law in April 2007 in which the government stipulates to business entities and consumers what actions they should take (Ministry of Economy Trade and Industry, 2009). This law regulates business use of containers and wrapping, and the manufacture of containers and wrapping. Hence, this strategy can be called an upstream 3R strategy that monitors the containers and wrapping environment and encourages people to adopt 3R behaviours. However, according to the annual report on environment and the sound material–cycle society in Japan 2009 (Ministry of the Environment, 2009), despite people’s high awareness of 3R, the number of people who have taken concrete actions for 3R is still small.

2.6.1c Road safety

‘Anti- drink driving’ campaign in Western Australia

In Australia, state governments are empowered to manage road-related matters (Parliamentary Education Office, 2009). Therefore, strictly speaking, anti–drink–drive activities are not conducted at the federal government level in Australia. However, because these activities appear to work the same as other social marketing activities by the federal government, it seems reasonable to review them in this section. The information that is reviewed in this section is based on the Western Australian (WA) Office of Road Safety, which has dealt with drink driving through education and law in WA. For example, the office conducted ‘Drink driving campaign 2008/2009’ during November 2008 and late January 2009, targeting 17 to 39 year–old male drivers in metropolitan and regional Western Australia (Office of Road Safety, 2009). This campaign was implemented to reduce drink driving in WA through mass media advertising that informed the audiences about the risks of drink driving and high possibilities of being caught (see figure 2.10 for anti–drink–drive poster).
Figure 2.10 Anti–drink–drive poster in 2009 ‘Sleep over. Don’t drink and drive.’ (Office of Road Safety, 2009)

In addition to the advertisements, the campaign developed community–based promotion and enhanced enforcement. Although this kind of campaign has been conducted occasionally, anti–drink–driving strategies appear to rely on enforcement in the long run. In WA, driving with over 0.05% of alcohol in the blood is a violation of the law for drivers who hold a full licence. The 0.02% limit is applied to extraordinary drivers licence holders –probationary drivers, learner drivers, drivers who are serving suspension– and to those whose licence have been cancelled/disqualified for a drink driving related offence (Western Australian Police, 2009). The penalties are from A$100 on issue of an infringement to A$5000 with permanent disqualification, depending on the blood alcohol content (BAC) levels and the drink driving record. In general, police assess drivers’ BAC through random breath testing (RBT) that stops a vehicle and asks the driver to take the test. The office also introduces ‘double demerits’ on all long weekends and holiday periods; however, despite this reinforced enforcement, drink driving is still a large contributors to fatal road collisions in WA (Office of Road Safety, 2009). Under these circumstances, the WA government decided to develop and implement a 12-year new road safety strategy ‘Towards Zero 2008-2020’ that aims to establish a road system that could eliminate death and serious injury on roads based on scientific research (Government Media Office, 2008). The WA government approved Towards Zero, and the Road Safety Council’s recommendations for 2008-2020 in March 2009 to address the four road safety foundations: safe speed, safe road use, safe vehicles, and safe roads and roadsides (Office of Road Safety, 2009). Therefore, current approaches towards drink
drive issues are likely to shift from a driver-focus to a more comprehensive focus during the next decade.

‘Drink driving’ eradication campaigns in Japan

The Japanese Government had taken similar approaches towards drink driving to those by WA government until 1999 when two children were burned to death in their parents’ car that was rammed from behind by a drunk truck driver on the Tomei Highway in Japan. On account of this tragedy, the government passed a new law ‘Dangerous Driving Causing Death or Injury’ against drink driving in 2001 (Cabinet Office, 2009). Although the tragedy alarmed a Japanese culture that was lax about drink driving at that time, alcohol-related traffic accidents were not eradicated even after the establishment of the new law (Australian Broadcasting Corporation, 2008). In 2006, three children drowned in the river after their parents’ car was hit by a 22-year-old drunk driver, and fell from the bridge in Fukuoka, Japan. Reflecting public demands, in 2007 the government implemented tougher penalty policies against drink driving that included cultural change (National Police Agency, 2009). Under the new Road Traffic Law, those who offer alcohol to potential drivers, those who offer a vehicle to drunk drivers, and those who consciously ride with a drunk driver are subject to severe penalties, including imprisonment. Figure 2.11 displays an anti drink–driving poster that refers to the three rules for eradicating drink driving.
Figure 2.11 Anti–drink–drive poster in 2009 ‘Three rules for eradicating drink driving: don’t drink and drive, don’t approve or let others drink and drive, and don’t let a driver drink’ (Cabinet Office, 2009)

The Japanese Government’s strategies with strict penalties and social pressure has led to a remarkable decrease in the number of drink–driving–related accidents (National Police Agency, 2009). According to the agency, 997 drink–driving–related accidents led to death in 2002, this decreased by 430 in 2007. However, at the same time, the agency stated that “drunk driving still continues and the police are strengthening efforts for the eradication of drunk driving” (p.120). As a result, the government amended the Road Traffic Law in June 2009 to make it tougher. For example, a drunk driver with over 0.15 % but under 0.25% breath alcohol concentration (or over 0.03% but under 0.05% BAC level) is subject for penalties with 90-day-suspension, imprisonment with labour not exceeding three years, fine not exceeding 500,000 yen (or about 5,300 Australian dollars). If the Dangerous Driving Causing Death is applied, a drunk driver will be subject to penalties with imprisonment with labour not exceeding 20 years.

2.6.2 Social Marketing in Australia and Japan

Table 2.3 summarises the campaigns that have been reviewed in the previous sections from the perspectives of social marketing definitions and its strategic approaches taken in each campaign. As seen in the table, there are remarkable differences between Australian
and Japanese Government-sponsored social programs for solving social issues, as follows:

- Promotional approaches have been adopted by the Australian Government, but not by Japanese Government;
- The Australian Government has adopted different combinations of strategic tools; however, the Japanese Government has adopted a particular combination of education and paternalism; and
- Go for 2&5 ® and 3Rs campaigns that have been planned and implemented by the Australian Government meet all the social marketing benchmarks; however, none of the three programs that have been planned and implemented by the Japanese Government fulfils all the benchmarks.

Table 2.3
Comparisons between Government-sponsored Social Campaigns in Australia and Japan

<table>
<thead>
<tr>
<th>Socially desirable outcomes &amp; their campaigns</th>
<th>Social marketing benchmarks &amp; strategic tools</th>
<th>Strategic tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy eating</td>
<td>Does the campaign apply target-audience orientation to its activities?</td>
<td>Does the campaign apply commercial marketing techniques?</td>
</tr>
<tr>
<td>Go for 2&amp;5 (AUS)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Syokuiku (JPN)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3Rs (AUS)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3R (JPN)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Waste reduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti drink drive (AUS)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Drink drive eradication (JPN)</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Note. (Aus) represents campaigns in Australia, (JPN) represents campaigns in Japan
From these findings, it could be assumed that the Australian Government believes in the effectiveness of social marketing and has applied it to developments of its social programs; the Japanese Government, on the contrary, still mainly relies on traditional social change programs. This could be also confirmed by other evidence. The Australian Government Department of Health and Ageing has repeatedly stated that social marketing is necessary for effective social change programs in its annual report 2008-2009 (2009a). This determination has shaped a social marketing unit in the department and the unit has taken charge of the information about the National Skin Cancer Awareness Campaign (summer 2009-2010, Department of Health and Ageing, 2009b) and the National Tobacco Campaign (Australian Government, 2009a), for example. These attitudes towards social marketing agree with their relatively long history of social marketing. For example, the first major national health social marketing was implemented in 1978 (Department of Health and Ageing, 2004). The famous anti–skin–cancer campaign ‘Slip, Slop, Slap’ started in 1989 (Cancer Council Australia, 2007) and has succeeded in changing Australian behaviours against tanning, taking advantage of social marketing techniques. In addition, successful government-sponsored social marketing programs can be also seen in the ‘Travelsmart’ campaign (James, 2002), ‘Immunise Australia’ program (Carroll & Van Veen, 2002), and a smoke alarm campaign (Camit, 2002). These campaigns all employed educational and promotional social marketing approaches. However, the Australian Government’s paternalistic social marketing programs against antisocial-behaviour-related-issues, including drink drive and drug-related violence, have not achieved their goals (Australian Broadcasting Corporation, 2007; Healey, 2009). This could be interpreted that Australians have accepted at least educational and promotional approaches towards health, transport, or home security issues; however, they have questioned paternalistic approaches. Jane Halton, Secretary of the Department of Health and Ageing, stated at the Fifth national Public Affairs Convention in 2004 “I certainly don’t think Australia is ready for a law against being lazy or overweight!” (Department of Health and Ageing, 2004).

No word related to social marketing has been found in the Japanese Government’s published or non-published information; besides that, even the word ‘marketing’ cannot be found in them. Although Osaka, Kanagawa, and Aomori prefectural governments have adopted marketing principles into their city administration, there seem to be several
barriers against social marketing or marketing at the national level of government. As mentioned by Andreasen (2006) there are several nations for this, one is less recognition of the advantages of social marketing at top levels. Many still believe the myths that marketing is merely advertising and that marketing is a profit-oriented activity, and the Japanese Government is no exception. Another reason is an inadequate definition of social marketing in Japan. As discussed in section 2.1.2, social marketing appears to be understood and used differently in Japan. Unlike the Australian Government, it can be said that the Japanese Government has attempted to solve social issues through regulating its people. However, this seems somewhat different from coercion, because Japanese appear to accept regulations by the government to solve social issues to some extent, although this does not necessarily apply to all Japanese. The public demand for strict laws against drink driving is a good example of this. However, the Advertising Council Japan (AC), a famous private advertiser of social issues, has criticised this government’s approach as one-way vertical communications (AC staff, personal communication, April 9, 2009). These facts stress the lack of target-audience-orientation in the Japanese Government-sponsored social change activities and emphasise the paternalism in the Japanese Government. Strictly speaking, Japanese Government-sponsored social change programs may not be called social marketing activities; however, some of their activities seem like social marketing or are part social marketing at least. For example, the government has announced modification of its 3R strategies into audience-oriented promotional approaches in the future, responding to ineffectiveness of the existing approaches. It can be assumed that the Japanese Government may adopt social marketing techniques unconsciously. Therefore, the researcher has decided to call social change activities conducted by Japanese Government social marketing activities throughout the rest of this study.

Figure 2.12 summarises government’s social marketing approaches and people’s general attitudes towards those approaches in Australia and Japan. In Australia, people are used to educational and promotional approaches and generally accept these approaches; however, they appear to show uncomfortableness with paternalistic approaches. In Japan, people are used to and appear to accept paternalistic approaches. However, they have little experience with educational and promotional approaches; therefore, it cannot necessarily
be said that they prefer paternalistic approaches to educational and promotional approaches.

A. Social marketing approaches and people’s attitudes in Australia

B. Social marketing approaches and people’s attitudes in Japan

Figure 2.12 Comparison of governments’ social marketing approaches and people’s general attitudes towards the approaches between Australia and Japan
2.7 Summary

This chapter has reviewed literature in social marketing definition, theories of attitude and behaviour change, freedom, values, cultural differences between young Australians and Japanese based on cultural characteristics and generations, and government-sponsored social marketing activities in health, environmental, and road safety fields. In addition, based on the findings of the reviews and other additional information, people’s general attitudes towards government-sponsored social marketing activities and their approaches have been deduced in this chapter. The Australian Government has generally approved the effectiveness of social marketing and recognised its importance; however, the Japanese Government does not seem to recognise the importance and has little knowledge about social marketing. As a result, the Australian Government has planned and implemented social marketing programs for solving various social issues; however, the Japanese Government has heavily relied on traditional social change programs, particularly using paternalistic approaches including laws and regulations. Australians seem to get used to educational and promotional social marketing approaches; however, they appear to have mixed feelings about paternalistic approaches. Japanese, on the contrary, seem to accept paternalistic approaches; however, this does not necessarily mean that they prefer paternalistic approaches to educational and promotional approaches simply that they have little experience with educational and promotional social marketing approaches.
Chapter 3: RESEARCH DESIGN

This chapter describes the research design of this study alongside the researcher’s worldviews. A PhD thesis does not necessarily always include worldviews. However, the researcher believed that enunciating her worldviews in the thesis would help readers more fully understand how the researcher designed the study and how she interpreted information and data through this study since worldviews form the philosophical foundations of a study and these foundations are certainly a framework that guides the study (Creswell & Plano Clark, 2007).

3.1 Research Foundations

Crotty (1998) suggested that there should be four basic elements to any research process and these four elements inform one another as seen in figure 3.1.

![Hierarchy of four basic elements](image.png)

Figure 3.1 Hierarchy of four basic elements. (Crotty, 1998, p.4)
For example, constructionism is a hidden epistemology in symbolic interactionism while theoretical perspective often adopts ethnography (i.e. methodology) to its own purpose. In consequence, participant observations can be justifiably chosen as research methods. This flow appeared extremely sound; therefore, the philosophical foundations underpinning the current study were distinguished based on these four elements.

3.1.1 Epistemological Stance

Epistemology is “the theory of knowledge embedded in the theoretical perspective and thereby in the methodology” (Crotty, 1998, p.3). In this study, the researcher took a monistic epistemological stance, believing that knowledge should be created from unity of subject and object. This stance may appear to conflict with classical Western epistemological schools, such as objectivism, constructionism, or subjectivism because they are mutually exclusive. However, if the stance is understood as an amalgamation of the major stances, the monistic stance can be considered an expansion of the classical worldviews. Greene and Caracelli (2003) called this multi-paradigms stance “Dialectic” (p.95) in which each paradigm is believed valuable, and consequently a use of multi-paradigms would allow a researcher to understand the world better. Multi-cultural investigation like this study, particularly, could be blessed with fair insights to explore the world from this multi-paradigm stance as this worldview gives researchers opportunities to analyse ‘truth’ from several viewpoints. Nonaka and Takeuchi (1995), Japanese advocates of knowledge management, indicated three distinctions of the unity of subject and object, which occurs when human-beings create knowledge. They were “ oneness of humanity and nature; oneness of body and mind; and oneness of self and other” (p.27) and the following explanations of the three oneness seem to justify how different paradigms could be harmonised with each other.

Oneness of humanity and nature

This trait is well described as “emotional naturalism” dubbed by Nakamura (cited in Nonaka & Takeuchi, 1995, p.28). In this dimension, no matter whether they are tangible or intangible, any objects in nature are treated virtually and concretely as if they had a soul and meaning. People feel sentiment and sympathy to the objects, and this brings about difficulties in the separation and objectification of self and nature.
**Oneness of body and mind**

While the major Western epistemological viewpoints stress body-mind separation or so-called dualism, this trait emphasises a role of knowledge as wisdom that can be acquired only through personal and physical experience. This can be exemplified in samurai education where wisdom was pursued through physical training. While this view appears very eastern, the oneness of body and mind could be understood by combining empiricism and constructivism because the monistic stance believes that knowledge is acquired when an individual actually experiences something (i.e. something is observable and measurable objectively) and that experience is penetrated into their personality (i.e. that belief involves a considerable degree of subjectivity).

**Oneness of self and other**

As seen in the above mentioned traits, the monistic worldview is “collective and organic” (Nonaka & Takeuchi, 1995, p.31). In this context, things are conceptualised by circularly interacting between her/himself and others or things.

To summarise, the monistic epistemological stance believes that human beings see reality through the interactions between physical experience and nature or other human beings. There is no dualism between subject and object here, but monism of subject and object, coming and going between subjective and objective viewpoints. This view cannot be explained well unless both subjective and objective paradigms are called up. Some criticism of this epistemology is anticipated as Glisby and Holden (2003) argued the inappropriateness of Nonaka’s theory in the Western context. However, the researcher retained this epistemology since regardless of western or non-western context; today’s world is so dynamic and complicated that the monistic approach, which is quite flexible, appeared fairly useful and helpful to an understanding of reality in this world. In fact, there have been movements even among Western scholars to adopt multi-paradigms viewpoints.

**3.1.2 Theoretical Perspective**

Theoretical perspective is “the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria” (Crotty, 1998,
and reflects an epistemological stance. Based on the monistic epistemological stance, the philosophical assumptions of this study were:

- Human beings see the world in the interactions with nature and other human beings;
- Repetition of the interactions forms the person’s perception, and in consequence, the repetition builds particular relationships among human beings, nature and other human beings; and
- Some of the perceptions and relationships are recognised by the person, but some are unconsciously hidden in the person.

These assumptions led the researcher to seek a methodology that enabled her to reach people's conscious and latent perceptions of ideas, attitudes, and behaviours in interest and relationships with these ideas, attitudes, and behaviours.

### 3.1.3 Methodology

Methodology is ‘the strategy, plan of action, process, or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes” (Crotty, 1998, p.3). As already informed by the theoretical perspective, this study needed a methodology that grasps subjective perceptions of those who participate in this study; and at the same time, objectively investigates relationships between human beings and their surroundings. Examination of various methodologies informed that integrating qualitative and quantitative data were the most appropriate strategy for this study as this appeared to satisfy the needs of both subjectivity and objectivity. Phenomenology, for example, is an effective strategy to focus on people’s subjective experiences and interpretations of the world (Trochim, 2001). However, phenomenology alone is not sufficient to investigate objectively relationships between human beings and their surroundings, since the main purpose of phenomenological methodology is to understand how others see the world, but not how others and the world are related. As contrasted with phenomenology, experimental research excels at proving relationships (e.g. cause-effect relationships), whereas, again, experimental research alone cannot explore both subjective and objective aspects, since this methodology does not involve an examination of a phenomenon in a natural setting (Pinsonneault & Kraemer, 1993). Combining qualitative and quantitative data is the only methodology that serves to
answer questions ‘what is happening?’, ‘how is it happening?’, and ‘why is it happening?’ simultaneously.

### 3.1.4 Research Methods

Methods are “the techniques or procedures used to gather and analyse data related to some research question or hypothesis” (Crotty, 1998, p.3), and a method must be consistent with its research foundations, epistemology, theoretical perspective and methodology. The study involved a combination of qualitative and quantitative techniques and this method has been recently called ‘a mixed methods’ study (Creswell, 2003; Creswell & Plano Clark, 2007). Some researchers like Tashakkori and Teddlie (2003) have argued that a mixed methods study should be based on pragmatism as this worldview uses a variety of approaches including subjective and objective knowledge and selects the most practical method. However, at the same time others like Creswell and Plano Clark (2007) have taken a more flexible position. They have suggested that philosophical foundations may differ depending on the type of mixed method designs used; therefore, it should be more natural that a researcher using mixed methods can adopt multiple philosophical foundations as long as their use is reasonably justified by the researcher. The philosophical foundations of this study fit well with this flexible stance. In addition, a mixed methods design is an approach that is “the natural complement to traditional qualitative and quantitative research” (Johnson & Onwuegbuzie, 2004, p.14) that affords researchers more accurate and deeper understanding of their subjects (Creswell, 2003; Creswell & Plano Clark, 2007; Johnson & Onwuegbuzie, 2004). There are four major designs that can be used in a mixed methods approach (Triangulation, Embedded, Explanatory, and Exploratory) (Creswell, 2003; Creswell & Plano Clark, 2007) and from which the researcher selected Exploratory design as this design was the most suitable to the purpose of the study. The Exploratory design is also called the Exploratory Sequential Design as the results of the qualitative phase can inform the subsequent quantitative phase (Figure 3.2) (Creswell & Plano Clark, 2007). This design has an advantage when “measures or instruments are not available, the variables are unknown, or there is no guiding framework or theory” (Creswell & Plano Clark, 2007, p.75).
The Exploratory Design can take two forms; the instrument development model or the taxonomy development model (Creswell & Plano Clark, 2007). The former can be used when a researcher needs to develop and conduct a quantitative instrument based on the findings of a qualitative study while the latter is used when a researcher needs to develop taxonomy (classification system), or a new structural theory. For this study, there were no existing variables to measure ‘readiness to accept government-sponsored social marketing activities’; therefore, they needed to be explored first. This situation was well suited to the use of an Exploratory Sequential Design and particularly an instrument development model. Accordingly, the objectives of this study were pursued through the Exploratory Sequential Design, employing an interview method for the first qualitative phase and a questionnaire survey method for the second quantitative phase within the instrument development model.

### 3.2 Research Procedures

This study followed the procedures shown in figure 3.3 to address the aims of the study. Firstly, qualitative text data was collected through focus group interviews and analysed to explore the key elements in operationalising a concept of readiness to accept government-sponsored social marketing activities. Secondly, based on the findings of the qualitative study, quantitative numeric data was collected and analysed, using a cross-sectional design. Lastly, the results of the qualitative and quantitative studies were interpreted, taking into account the current situations of government-sponsored social marketing activities in Australia and Japan as well, which is discussed in chapter 2. Both qualitative and quantitative studies were administered with samples of Australian and Japanese university students aged between 18 and 23 years.
PROCEDURES

1. Qualitative data collection
   ↓
2. Qualitative data analysis
   ↓
3. Qualitative results
   ↓
4. Questionnaire development
   ↓
5. Quantitative data collection
   ↓
6. Quantitative data analysis
   ↓
7. Quantitative results
   ↓
8. Interpretation based on results of qualitative and quantitative studies and current situations of social marketing in Australian and Japan

MAIN METHODS

- Focus group interviews
- Contact summary sheets
- Transcription of interviews
- First-level coding with NVivo8
- Pattern coding
- Bilingual judges technique for translation
- Discussions
- Content validation by experts’ reviews
- Mock survey for face validation by students
- Bilingual judges technique for translation
- In-depth interviews with students for the second face validation
- Pilot tests in Australia and Japan
- Descriptive analyses
- Exploratory factor analysis
- Self-administered-pen-and-paper-questionnaire survey in Australian and Japan
- Mean comparison
- Exploratory factor analysis
- Confirmatory factor analysis
- Structural equation modeling analysis
- Discussions

Figure 3.3 Research procedures and main methods used for this study

Australian students were recruited at the same university in Western Australia for both qualitative and quantitative studies. Japanese university students were recruited at a university in the northern part of Honshu, Japan for the qualitative study, and in the western part of Honshu, Japan for the quantitative study. Some may argue against this case of the Japanese sampling. However, this was the feasible and the best course under
constraints of a PhD project. In particular, as the researcher resided in Western Australia, it was impossible for her to visit Japan constantly to organise the focus groups interviews, the pilot study and the main survey at one particular university, along with implementing them in Western Australia.

Each of the procedures in the figure is detailed in chapters 3, 4 and 5. However, essences of qualitative, quantitative, and cross-cultural study are explained briefly in relation with the selected methods in the rest of this chapter.

3.3 Nature of Qualitative Research

3.3.1 Basis of qualitative research

Q. What colours are traffic lights?
A. Red, yellow, and green.

This answer may be correct to the most Australians; however, it may be wrong to Japanese. For Japanese, traffic lights are red, yellow, and ‘blue’, but not ‘green’. Are colours of the Japanese traffic lights actually different from those in Australia? No, they are the same; then why do Japanese call the same light ‘blue’ instead of ‘green’? Qualitative research is administered to find the answer to a why question like this (Debus, 2007). Auerbach and Silverstein (2003) defined qualitative research as “research that involved analysing and interpreting texts and interviews in order to discover meaningful patterns descriptive of a particular phenomenon” (p. 3). That is, qualitative research is chosen when researchers need to explore and understand details of experiences, phenomena, or their processes (Bazeley, 2007). Auerbach and Silverstein (2003) distinguished qualitative research as an alternative to “hypothesis-testing research” (quantitative research), calling it “hypothesis-generating research” (p. 4). There are commonly two types of qualitative data; interview transcripts and observation notes (Hill, 2008) which are, unlike quantitative research, “complex and contexted, and … are not easily reduced immediately (or, sometimes, ever) to numbers” (Richards, 2005, p. 34), that is qualitative data is concerned with meanings, whereas quantitative data relies on numbers (Dey, 1993). In addition to these complexities, there are numerous qualitative approaches. Tesch (1990) discerned more than 40 qualitative approaches such as clinical
research, ethnography, and phenomenology, and divided them into three groups based on their research orientations; language-oriented approach, descriptive/interpretative approach, and theory-building approach. As mentioned by Tesch herself, this classification may not be perfect; however, it should help researchers to choose wisely from the plethora of approaches. The main objective of the qualitative research in this study was to inform the subsequent quantitative research on how to measure readiness to accept government-sponsored social marketing activities. The research explored what are concepts of this readiness and how it is determined and detected. This situation did not require communication investigation or theory exploration; however, it was needed for exposing this concept from individuals through interpreting qualitative data provided by them. Therefore, a descriptive/interpretative approach was employed, which aims to interpret and describe social phenomena including social and individual actions.

3.3.2 Focus Group Interviews

A focus group interview is one of the qualitative research techniques which is an “in-depth group interview employing relatively homogenous groups to provide information around topics specified by researchers” (Hughes & DuMont, 1993, p. 776). Although focus groups were rarely used in the social sciences in the early 1980’s, their role in academic research has subsequently grown dramatically (Morgan, 1997). Morgan suggested that this probably resulted from the academic researchers’ abilities to apply and adapt marketers’ expertise with focus groups to their fields and academic goals. However, it has also happened that some researchers inappropriately chose and administered focus groups. Morgan and Krueger (1993) stressed that researchers should consider the appropriateness of focus groups for their situations and purposes (see Table 3.1). The current study required the perceptions of university students about government-sponsored social marketing activities which: 1) was not considered a daily topic of conversation and 2) the degrees of consensus on a topic, within each ethnicity and within each gender, were sought. These situations ensured the appropriateness of using focus groups for this study. Accordingly, qualitative data in this study was collected through focus group interviews.
Table 3.1
Situations When Focus Groups are Appropriate and Not Appropriate (after Morgan & Krueger, 1993, pp. 11-18)

<table>
<thead>
<tr>
<th>When</th>
<th>Do not use focus groups</th>
<th>Use focus groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The primary objective is not to collect qualitative data, but to</td>
<td>• Feedback from those who have limited power and influence is needed.</td>
<td>• There is a gap between professionals and their target audiences and there is need to understand real perceptions of the latter.</td>
</tr>
<tr>
<td>resolve conflicts, make a decision, or change attitudes.</td>
<td>• Statistical data are required.</td>
<td>• Researchers seek to understand people’s motivations, feelings, attitudes, and opinions about a research topic which people usually do not talk in their daily life.</td>
</tr>
<tr>
<td>• Participants’ self expression is limited, for example, by less</td>
<td>• Researchers want to learn more about the degree of consensus on a topic.</td>
<td>• Researchers need a friendly research method that is respectful and not condescending towards their target audiences.</td>
</tr>
<tr>
<td>homogeneity of a group, an over strong researcher’s view, and ethical</td>
<td>• The topic is above participants’ abilities.</td>
<td></td>
</tr>
<tr>
<td>concerns.</td>
<td>• Participants’ self expression is limited, for example, by less homogeneity of a group,</td>
<td></td>
</tr>
<tr>
<td>• The topic is above participants’ abilities.</td>
<td>an over strong researcher’s view, and ethical concerns.</td>
<td></td>
</tr>
<tr>
<td>• Statistical data are required.</td>
<td>• Feedback from those who have limited power and influence is needed.</td>
<td></td>
</tr>
</tbody>
</table>

3.3.3 Applications of Focus Groups

There are three basic applications of focus groups in social science; “self-contained method”, ‘multimethod studies”, and “supplementary source of data” (Morgan, 1997, p. 2). When focus groups are used as a self-contained method, they are ranked as a major source of qualitative data where researchers reach the conclusions based solely on the data from focus groups. In contrast, in multimethod studies, focus groups are generally combined with other qualitative methods, such as individual interviews and participant observation. Lastly, focus groups also play a supplementary role in social science research. In this use, focus groups provide supportive data for a quantitative study; for example, in quantitative instrument development or in explaining quantitative results (Morgan, 1997). In this study, focus groups were mainly used in the third role, particularly, as a quantitative instrument developer. As an instrument developer, focus groups provide quantitative research with two main benefits (O’Brien, 1993): actual questionnaire contents, such as “wording”, “item development”, and “research questions”
and perceptions of members of the targeted population towards a certain research topic. O’Brien demonstrated these benefits in the Portland Men’s Study. The appropriateness of focus groups used for instrument development was also demonstrated by Fuller, Edwards, Vorakitphokatron, and Sermsri (1993). They emphasised the usefulness of focus groups for developing quantitative instruments for new populations. This usefulness resulted from the most distinct advantage of focus groups, providing unexpected insights of participants through interactions among participants (Liamputtong & Ezzy, 2005). Zeller (1993) similarly stressed that focus groups are of great use because they allow researchers to explore “the phenomenological meanings attached to their [participants’] norms, values, attitudes, and behavior patterns” (p. 98). This statement seems to be applied to different cultures too. Hughes and DuMont (1993) remarked that focus groups could be used as a culturally anchored methodology, quoting their study of dual-earner African American families. Willgerodt (2003) also acknowledged the value of using focus groups as a culturally relevant survey method, specifically with Chinese immigrant families in the US. Although many cultural studies have adopted the traditional methods, when researchers deal with non-mainstream western cultures as in this study, including Japanese culture, the validity of that usage is doubtful (Willgerodt, 2003). As the traditional methodology have been dominated by mainstream cultures (Seidman, 1993); generally American and European studies, dealing with non-mainstream cultures must treat unique cultural aspects carefully. Hughes and DuMont (1993), and Willgerodt (2003) concluded that focus groups can help facilitate culturally anchored research by stressing participants’ perceptions and experiences about given topics in their own way, by profiling participants’ social interaction mechanisms, and by providing appropriate uses of participants’ language and expression.

### 3.4 Nature of Quantitative Research

#### 3.4.1 Basis of quantitative research

Bryman (2004) described quantitative research “as entailing the collection of numerical data and as exhibiting a view of the relationship between theory and research as deductive, a predilection for a natural science approach….and as having objectivist conception of social reality” (p.62). Quantitative research was originally applied to the natural sciences
such as physics, biology, and chemistry, where application of natural laws to phenomenon was the most interest. However, in the social sciences, quantitative research is used to understand and explain human behaviours or society systematically (Betts, Hayward, & Garnham, 2001). Therefore, quantitative research in the social sciences could be considered an approach that attempts to grasp reality through examining if the particular theory or hypothesis is capable of explaining social phenomenon. Despite the application of quantitative research in the social sciences, it has been criticised by qualitative researchers in that social phenomenon is self-reflection of human beings so that quantitative research that lacks subjectivity has limitations of ability to explain the reality (Schutz cited by Bryman & Cramer, 1990). Some others have also said that quantitative research in the social sciences is artificial and manipulation of numbers (Cicourel cited by Bryman & Cramer, 1990). However, if it is presumed that quantitative research is a continuance of qualitative research as shown in figure 3.4, researchers must be able to make the best use of advantages of quantitative research in the social sciences as well. In fact, the exploratory mixed method that was selected for this study followed this presumption and quantitative research was necessary to confirm whether the findings provided by qualitative research could be generalised into a large population in this study.

**Figure 3.4** Diagram of exemplified qualitative-quantitative research comparison (after Ishikawa, 2009)
There are three advantages of quantitative research for finding:

- effectiveness, for example effectiveness of new medicine;
- influence of particular factors, for example influences of new medicine on particular symptoms of particular decease; and
- broad trends, for example general attitudes towards new medicine in a population (Creswell & Plano Clark, 2007).

Bryman (2004), and Creswell and Plano Clark (2007) suggested that experimental designs should be suited for finding effectiveness, and survey/correlation designs for finding influence and broad trends. Main purposes of quantitative research in this study were:

- to validate the quantitative instrument that measured readiness to accept government-sponsored social marketing activities;
- to test hypothesised relationships between the readiness and values related to the freedom of the individual; and
- to compare trends between Australian and Japanese university students.

These purposes were well met to the last two advantages of quantitative research; therefore, as suggested by the existing literature, survey/correlation designs were employed for this study.

### 3.4.2 Survey/correlation design

Survey designs are also called correlation designs as collected data in the survey design is valid to disclose relationships among variables or concepts (Bryman, 2004). This design is a useful framework for investigating influences of particular factors or broad trends in natural social context, as a researcher cannot manipulate any collected data in survey/correlation design. Unlike an experimental design that creates control groups for examining effectiveness of a particular factor, a researcher cannot make a male respondent a female respondent in the survey/correlation design, for example. Some may say that qualitative observation design can also investigate influences of factors or broad trends as survey/correlation design does; however, quantitative survey/correlation design is necessary when a researcher wants to know something that cannot be directly observed (Balnaves & Caputi, 2001). Neither validity of the measurement instrument nor relationships between readiness to accept social marketing activities and values of
individual freedom can be directly observed; therefore, again, quantitative survey/correlation design was considered the most appropriate for this study.

Survey/correlation designs “encompasses any measurement procedures that involve asking questions of respondents” (Trochim, 2001, p.108) about “who they are (education, finances, etc), how they think (motivations, beliefs, etc), and what they do (behaviour)” (Balnaves & Caputi, 2001, p. 76). Survey/correlation designs usually take two forms: questionnaires and interviews. Questionnaires are ‘written question sets for completion by subjects” (Black, 1999, p. 225) and interviews are orally presented questions for voice or face-to-face responses by participant(s). According to Kumar (1996), researchers must consider the choice between a questionnaire and interview thoroughly “as the strengths and weaknesses of the two methods can affect the validity of the findings” (p.110). As seen in Table 3.2, a questionnaire stands out in gathering a large number of data, which gives advantages to analysis of collected data for exploring relationships among variables. While this technique is inferior in capturing subjective in-depth information, considering the main role of quantitative research as a theory tester (Marsh, Hau, & Wen, 2004), a questionnaire design was employed as the quantitative research method in this study.

Table 3.2
Advantages and Disadvantages of Two Survey Methods (based on Coombes, 2001; Kumar, 1996; O'Connor, 2007; Patton, 2002; Trochim, 2001)

<table>
<thead>
<tr>
<th></th>
<th>Questionnaire</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>- is relatively inexpensive to administer</td>
<td>- allows researchers to get information from people who cannot read</td>
</tr>
<tr>
<td></td>
<td>- allows researchers to ask the same questions to many people</td>
<td>- allows researchers to ask the respondent to clarify unclear answers and to explore interesting answers</td>
</tr>
<tr>
<td></td>
<td>- allows respondents to fill it out at their own convenience</td>
<td>- is more appropriate for complex situations</td>
</tr>
<tr>
<td></td>
<td>- provides greater anonymity</td>
<td>- can explain questions</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>- has often low response rates</td>
<td>- is time consuming</td>
</tr>
<tr>
<td></td>
<td>- includes reactive weakness that respondents tend to give socially desirable responses</td>
<td>- is resource intensive</td>
</tr>
<tr>
<td></td>
<td>- is often full of systematic biases</td>
<td>- needs moderators who are well trained to respond to any contingency as the moderator is considered a part of the measurement instrument</td>
</tr>
<tr>
<td></td>
<td>- limits a study population</td>
<td>- may introduce researcher’s bias</td>
</tr>
<tr>
<td></td>
<td>- allows respondents to consult others</td>
<td>- may vary its quality of data when many moderators are used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- may introduce a moderator’s bias</td>
</tr>
</tbody>
</table>
3.5 Cross-cultural Comparison

This study involved not only a mixed methods approach but also a cross-cultural comparison, between Australian and Japanese respondents. Interests in cultural differences or similarities have continuously increased among fields, including management (Farh, Cannella Jr, & Lee, 2006), marketing (Donoho, Polonsky, Roberts, & Cohen, 2001), and consumer behaviour (Yeniyurt & Townsend, 2003) in addition to sociology and anthropology which have a long history of cross-cultural research. This was mainly because more researchers have started questioning the applicability of the western-based theories, especially American, which have been mainstream in their fields for a long time, to other cultures (Maheswaran & Shavitt, 2000). For example, it has been assumed that more than 90 percent of published psychological studies are based on Western contexts, the United States and Canada in particular (Lonner & Malpass, 1994). Social marketing is no exception, either. Although social marketing has been used in many different countries in the world, like the psychological field, it is obvious that western-viewpoints have dominated its theories. Is western-theory-based social marketing well adapted to non-western culture? Involvement of cross-cultural comparison in this study appeared advantageous for two reasons. Firstly, the cross-cultural comparison between Australia and Japan was expected to help social marketing researchers further develop non-western-based social marketing theories. Effectiveness of the mainstream of the present social marketing in multi-cultures cannot be assessed from mono-cultural study. Secondly, the researcher reasoned that the effects of values relating to the freedom of the individual on readiness to accept government-sponsored social marketing activities could be more clearly identified and validated by comparing respondents from different cultures. Significant correlation between the values and such readiness in different cultures, Australia and Japan in this study, could suggest a higher possibility to generalise particular relationships between the values and the readiness to other cultures, too, or a higher ability of values to predict attitudes even in different cultures other than Australia or Japan. Therefore, it was believed that findings of this study could help both the Japanese and Australian Governments improve their social marketing.
As noted previously, a research approach including cross-cultural elements has provided deeper understanding of human beings in various fields. However, as emphasised by Maheswaran and Shavitt (2000), researchers engaged in study with multi cultures have to pay close attention to several issues that cross-cultural comparison connotes. The following sections explain those issues in more detail and how this study dealt with them.

3.5.1 Equivalence in cross-cultural comparison

Q. Does this poster make you to reduce speed?

![Poster](image_url)

**Figure 3.5** “Speeding. No one thinks big of you”; Poster for anti-speeding campaign (Roads and Traffic Authority NSW, 2007a)

This poster, which was produced by New South Wales Roads and Traffic Authority in Australia, was labelled as one of the most successful anti-speeding campaigns in 2007. The authority reported that about 70% of general and male drivers agreed to the effectiveness of this poster in making them reduce speed (Roads and Traffic Authority NSW, 2007b). In the poster, a young woman is merely wiggling her little finger. However, her gesture, at the same time, sends a tacit but vivid message that speeding is not socially appreciated to Australians, taking advantage of the hidden meaning of the gesture that indicates the size of men’s genital or intelligence. Then, does this poster similarly affect the Japanese audiences? It can be reasonably assumed that this poster would not affect Japanese behaviours towards speeding as much as it did to Australians. Does this, and then again, mean that Japanese do not support a social idea of anti-speeding? No, it may
be because this poster does not give any anti-speeding message to Japanese. In fact, the
gesture represents a girlfriend in the Japanese context so that no anti-speeding message is
hidden in this poster for Japanese. Under these circumstances, is it meaningful to ask the
opening question to Australians and Japanese and compare the collected data from them?
As comparison between 1g and 1oz equivalently appear meaningless, it is extremely
important for researchers conducting cross-cultural comparison to make their data
‘equivalent’ (or ‘comparable’) (Berry, Poortinga, Segall, & Dasen, 2002).

3.5.1a Types of equivalence

According to Oxford advanced learner’s dictionary (Oxford University Press, 2000),
equivalence means “the condition of being equivalent; equality of value, force,
importance, significance, etc”. These general meanings have been applied to the field of
cross-cultural comparison and more than 50 types of equivalence have been discussed by
anthropologists, psychologists, marketers, economists, or social scientists during the last
four decades (Johnson, 1998). It appears a Herculean task to achieve those over-50 types
of equivalence, although it may be an ideal to demonstrate as many equivalence types as
possible. However, considering the reason why the importance of comparability or
equivalence in cross-cultural comparison has been repeatedly discussed, more practical
pictures how to reasonably achieve the equivalence are likely to emerge. Precisely,
cross-cultural research potentially holds inevitable bias that is regarded as disturbances of
comparability and it has been acknowledged that minimising bias leads to maximise
equivalence (van de Vijver, 2001). Van de Vijver discussed three main types of bias and
their sources as follows:

1. Construct bias: this bias occurs when data collected from multi countries is
   merely compared without taking into account a presence of culturally specific
definitions of a subject in interest;
2. Method bias: method bias can be resulted from paying no attention to differences
   between/among multi cultures in inherent characteristic of target samples,
familiarity with administrative environments, and familiarity with an instrument;
   and
3. Item bias: item bias is often brought about by poor translation of question item
   contents.
Although there are more than 50 labels of equivalence, they can be sub-classified, corresponding to the above bias. In fact, as shown in Table 3.3, Hui and Triandis (1985) and Johnson (1998) summarised those labels into four and two groups respectively, which corresponded to the three types of bias.

Table 3.3
Types of Bias and Their Correspondents of Equivalent Types (after Hui & Triandis, 1985; Johnson, 1998; van de Vijver & Leung, 2001)

<table>
<thead>
<tr>
<th>Types of equivalence by Hui &amp; Triandis</th>
<th>Bias</th>
<th>Types of equivalence by Johnson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conceptual equivalence</td>
<td>Construct bias</td>
<td>1. Interpretative equivalence</td>
</tr>
<tr>
<td>2. Construct operationalising</td>
<td>Method bias</td>
<td>2. Procedural equivalence</td>
</tr>
<tr>
<td>equivalence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Scalar equivalence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Item equivalence</td>
<td>Item bias</td>
<td></td>
</tr>
</tbody>
</table>

Conceptual equivalence refers to similarity in ways of responding towards the concept tested across cultures (Hui & Triandis, 1985; Maheswaran & Shavitt, 2000). For example, measuring belch as an index of replete would not be appropriate in Australia as this is regarded as a vulgar behaviour. Construct operationalising equivalence means equal applicability of operationalising procedure and an operationalised concept across cultures (Hui & Triandis, 1985; Maheswaran & Shavitt, 2000). For example, it would be irrelevant if the data is collected through pen and paper questions from illiterate respondents or if a quality of egg is operationalised in terms of brown-colour strength of its shell in Japan, where most of eggs in their market have white-colour shells. Scalar equivalence represents similarity with a way of responding scales. For example, some cultures show significantly different patterns of point clustering from others. Item equivalence can be well exemplified by the previous NSW anti-speeding poster. If selected items or questions do not mean the same to respondents from different cultures, it would be difficult to compare their responses. While Johnson (1998) summarised the equivalence into only two categories, the second category, procedural equivalence, can be accounted to include construct operationalising, scalar, and item equivalence by Hus and Triandis (1985). These reviews hinted to the researcher that narrowing down the four types of equivalence could be sufficient for establishing necessary equivalence in this study. Furthermore, as suggested by Johnson (1998), Salzberger, Sinkovics, and
Schlegelmilch (1999), and Maheswaran and Shavitt (2000), whether or not all of the four equivalence should be established in this cross-cultural research was examined based on cultural study orientations that anchored this study.

### 3.5.1b Emic and etic orientation

Generally, cultural study is considered based on two different orientations: ‘emic’ and ‘etic’ coined by Pike (1967). These two terms can be traced back to the two lines of thought in the 18th century: empiricist and interpretivist (Kashima, 2000). Interpretivist believed that there was no law in human behaviours so that the behaviours should be observed and understood within the contexts of interest, while empiricist considered that there were universal laws in human behaviours; therefore, investigation could be achieved through testing a particular law in different contexts. These differences are reflected to emic and etic approaches and Berry, Poortinga, Segall, and Dasen (2002) summarised differences between them as shown in Table 3.4.

<table>
<thead>
<tr>
<th><strong>Emic approach</strong></th>
<th><strong>Etic approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies behaviour from within the system</td>
<td>Studies behaviour from a position outside the system</td>
</tr>
<tr>
<td>Examines only one culture</td>
<td>Examines many cultures, comparing them</td>
</tr>
<tr>
<td>Structure discovered by the analyst</td>
<td>Structure created by the analyst</td>
</tr>
<tr>
<td>Criteria are relative to internal characteristics</td>
<td>Criteria are considered absolute or universal</td>
</tr>
</tbody>
</table>

If a researcher focuses on the emic, they do not need to worry about equivalence of their data as their study is conducted based on the premise that each culture is different from others. However, if they chose the etic, their data must satisfy all of the four types of equivalence in the previous section, because they believe that even among different cultures, they share the same law. Emic and etic approaches used to be considered to oppose each other, and researchers who worked with cultures were required to indicate
their manners either emic or etic orientation. Although the debate between them has continued to exist and some researchers still rigidly insist to dissociate the two traditions (Maheswaran & Shavitt, 2000), this study chose to take a position that integrates both emic and etic orientations for three reasons. Firstly, emic and etic approaches are actually not conflict but they can be integrated as suggested by Berry (1989). He proved this integration, using a diagram of five steps (Figure 3.6). Those steps appeared very flexible and realistic in that culture could be understood from both ‘Know thyself’ and ‘Known unknown’.

<table>
<thead>
<tr>
<th>Step</th>
<th>Research Activity</th>
<th>Culture A (Own)</th>
<th>Culture B (Fairbrother)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Begin research in own culture</td>
<td>EMIC A</td>
<td>IMPOSED ETIC</td>
</tr>
<tr>
<td>2.</td>
<td>Transport to other culture</td>
<td>EMIC B</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Discover other culture</td>
<td></td>
<td>EMIC B</td>
</tr>
<tr>
<td>4.</td>
<td>Compare two cultures</td>
<td>EMIC A</td>
<td>EMIC B</td>
</tr>
<tr>
<td>5-1.</td>
<td>Comparison not possible</td>
<td>EMIC A</td>
<td>EMIC B</td>
</tr>
<tr>
<td>5-2.</td>
<td>Comparison possible</td>
<td>EMIC A</td>
<td>EMIC B</td>
</tr>
</tbody>
</table>

Figure 3.6 Steps in operationalising emics and etics (Berry, 1989, p. 730)

Secondly, the position that integrates emic and etic orientations was consistent with the epistemological stance of this study which was based on the idea that combines subjectivity and objectivity. This oneness could not be pursued by single orientation either emic or etic. In reality, this research was originally motivated by the researcher’s subjective interest in whether Australian university students would respond towards
government-sponsored social marketing activities similarly to the Japanese, or differently. This began from the Japanese emic but it became the etic when the Japanese law was applied to the Australians, although at that time, equivalence between the two cultures was not validated. Lastly, this study began with presuppositions that a concept of values related to the freedom of the individual and degree of readiness to accept government-sponsored social marketing activities would be different between Australians and Japanese; however, correlative relations between the values and the readiness would be similar between them. This situation fits well with the integration of emic and etic. Accordingly, this study was led to the position where conceptual equivalence of target concepts (values related to the freedom of the individual in this study) was doubted, while construct operationalising equivalence (readiness to accept government-sponsored social marketing activities in this study), item equivalence, and scalar equivalence were attempted to be established. Details of each method for establishing those three types of equivalence are explained in chapters 4, 5 and 6 as different stages needed different techniques to establish necessary equivalence. However, language had challenges throughout the study; therefore, how this study attempted to avoid inequivalence resulting from poor translations is explained next.

3.5.1c Language

This study involved two different languages, English and Japanese, at all of the data collection and analysis stages. Therefore, this required the study to translate the questions and the data from English to Japanese and from Japanese to English. This study employed a “simultaneous” (Tasaki, 2008, p. 28) approach in developing questions for qualitative and quantitative study, where a draft of English version was first developed and, based on the original draft, English and Japanese versions were completed through repeated processes of translation-modification conducted by more than two persons. This approach was considered advantageous in that the validity of the questions could be enhanced by repeating translation and modification, although it was regarded as a time and labour consuming approach. Translation in this study was done using a ‘bilingual judges technique’. This is a variation of a back translation technique in which data already translated into a foreign language is translated again back to the original language by different translators for each language. Instead of different translators, in the bilingual judges technique, the same judges review both the original-language and the
translated-language (Metagora, 2007). Although a back translation technique is useful when a researcher has no knowledge of the target language, this technique does not necessarily insure an accurate target language version. Considering advantage of the researcher’s and her associate supervisor’s bilingual background with Japanese and English, it was deemed that a bilingual review technique for translations of a questionnaire and responses was the most suitable for this study. Furthermore, translations of the interview protocol for qualitative study, the collected qualitative data, and survey questions for quantitative research were inspected by two more English-Japanese bilingual reviewers, in addition to the researcher and her associate supervisor.

3.5.2 Approaching level

Culture influences human beings at several levels including society, category, group, and individual, and different disciplines approach the influences from different levels (Hofstede, 2001). For example, anthropologists may consider cultural influences on an individual more holistically, taking into account factors of social environments, while psychologists may focus on cultures at an individual level, such as ideologies and individual values. Although values weighed with this study, the researcher was also aware of the influences at a social level. However, as more resources including time, labours, and finances were needed to investigate cultural influences at a social level, this study mainly focused on influences of values on individual attitudes. Influences of a social level were limited to supplementing findings at the individual level by gathering and analysing the secondary data of the targeted societies in this study.

3.6 Summary

This chapter has described research foundations of the present study, including epistemology, theoretical perspective, methodology, and methods of this study. These are a principle of the present study; hence, all other chapters of this thesis are based on this principle. In the sections of research methods, details and rationale of the qualitative and quantitative methods chosen for the present study have been also discussed.
Chapter 4: FOCUS GROUP INTERVIEWS

This chapter details; 1) how qualitative data were collected from focus groups of Australian and Japanese university students, 2) how collected data was analysed, 3) what the data analysis revealed, and 4) how the researcher interpreted those findings in conjunction with the sequential quantitative research.

4.1 Objectives

The main purposes of the focus group interviews were to conceptualise readiness to accept government-sponsored social marketing activities, and to explore values related to individual freedom. To achieve these goals, the following four secondary research questions were investigated:

1. What do people say about government-sponsored social marketing activities and their acceptance or rejection of social marketing messages?

2. What are the key elements in operationalising a concept of ‘readiness to accept government-sponsored social marketing activities’? (social marketing activities include social marketing messages as well as advocacy for regulatory and environmental change)

3. How is readiness to accept government-sponsored social marketing activities detected and determined?

4. What are values relating to individual freedom?
4.2 Sampling

Qualitative inquiry primarily aims to capture in-depth and rich information from small samples, and appropriate sampling strategies depend on a study’s purpose and logistics (Patton, 2002). Therefore, qualitative samples, in the most cases, are purposive (Miles & Huberman, 1994). This study involved a cross-cultural comparison between Australians and Japanese as well as qualitative exploration of concepts of values related to the freedom of the individual and readiness to accept government-sponsored social marketing activities. Accordingly, sampling strategies were developed to satisfy the need for homogeneity within individual groups and the best heterogeneity among groups. To fulfil these conditions, a stratified purposeful sampling strategy, one of the purposeful samplings, was utilised. Stratified purposeful sampling includes preselected characteristics of subgroups of interest, so that it will enable the collected information to compare between (or among) different groups (Miles & Huberman, 1994; Sandelowski, 2000). This study characterised subgroups using the following categories:

- status: university students (preferably undergraduates);
- age: between 18 and 23 years;
- gender: female/male; and
- ethnicity: Australian/Japanese

The wave of westernisation among the Japanese younger generation was emphasised by Goy-Yamamoto (2004); however, this study ventured to target young university students rather than the middle aged (cf. Soutar et al., 1999) for three reasons. First, it was expected that the answers from young generations would help reveal whether each country has unique perceptions of values regardless of generations, or whether they now share common perceptions of values regardless of different cultural backgrounds. Second, the young adulthood including university students aged between 18 and 23 years has been often targeted by government-sponsored social marketing campaigns (e.g. anti-smoking campaigns, anti-binge drinking campaigns, and anti-drug campaigns in both Australia and Japan). Third, the researcher was well placed to recruit participants in this category. She had connections with universities both in Australia and in Japan; therefore, it was expected to be more manageable to recruit participants from the student body than from the public. In Japan, the age of university students concentrates between 18 and 23 years since most university students enter a university just after finishing high school at the age
of 18. The age range of Australian university students is widely spread; for example between 15 and 92 years at one of the universities in Western Australia in 2004; however, more than 50% of tertiary level students was between 18 and 23 years (Edith Cowan University, 2004). From these facts, it was reasonably assumed that an age range between 18 and 23 years could encompass a major group of university students in both Australia and Japan.

Ethnicity, in particular, was defined with the most care, because as cautioned by Aly and Henley (2008), a researcher’s perceptions and assumptions of cultures may affect the manner in which ethnicity is defined, and this definition may impact on the results of their study. This study considered that cultures are factors that form similar values and shared identities among people of a group and these similarities and identities could be called ethnicity. Culture is shaped and changed by those who largely account for population of a group for a relatively long time, and that culture may penetrate people by exposing them to it in long time (Kashima, 2000). Therefore, this study selected a place where a participant was mainly raised as the first determinant of ethnicity: Australia for Australian ethnicity group and Japan for Japanese ethnicity group. Additionally, a language spoken by participants at home with their parent(s) was also chosen as another determinant because linguistic literature (e.g. Wierzbicka, 1997) proved that language reflects cultures. According to 2006 Census of Population and Housing (Australian Bureau of Statistics, 2006), 80 per cent of the Australian population spoke only English at home in 2001 and 78.5 percent in 2006. Therefore, English was selected for the Australian ethnic group. No population census has been conducted by language in Japan. However, after considering a habitual use of Japanese for communications among Japanese and a rate of 82 per cent of Japanese nationality in its population (Statistics Bureau Director-General for Policy Planning & Statistical Research and Training Institute, 2006), it can be reasonably assumed that majority of people in Japan use Japanese; hence Japanese for the Japanese ethnic group. Some may raise concerns about participants’ birthplaces and parent(s)’s backgrounds; however, as long as target participants are raised in Australia or Japan and speak English or Japanese at home, they are likely to have assimilated themselves into Australian or Japanese culture (see Murphy & Anderson, 2003).
In addition to stratified purposeful strategy, a “replication strategy” (Yin cited in Miles & Huberman, 1994) was also applied to the sampling. The replication strategy can add robustness and confidence to the findings by duplicating groups. For example, if findings in one group are also seen in another group, the findings become more credible and reliable. This criterion yielded duplicate groups of all four combinations of gender and ethnicity, so eight groups in total were originally proposed for focus group interviews. Although the number of participants should be varied depending on when a researcher reaches a saturation point (Guilfoyle & Hill, 2002), approximate numbers of participants needed to be provisionally predetermined for the smooth recruitment of participants. A traditionally accepted size for a focus group was eight to ten participants; however, the trend has been towards use of smaller focus groups composed of five to seven participants (Debus, 2007). The advantages of smaller groups have not been proven (de Ruyter, 1996), yet at the same time no differences between focus groups with eight-members and four-members were shown by Fern (1982). Hence, considering feasibility, this study predetermined the size of participants based on smaller focus group strategy. To avoid a problem caused by ‘no-shows’, it was planned to recruit eight provisional participants for each group.

4.3 Interview Protocol

The qualitative data collection was guided by ‘interview protocol’ (Guilfoyle & Hill, 2002) since the protocol serves as “a summary statement of the issues and objectives to be covered in the interviews, as ‘a road map’, and as ‘a memory aid for the moderator’” (Debus, 2007, p.24). There are three kinds of protocols; structured, unstructured, and semi-structured (Guilfoyle & Hill, 2002), and a semi-structured protocol was chosen for this study for two reasons.

1. Unlike structured protocols, the main topics can be asked in random order, and participants are allowed to express their opinions and feelings freely about the topics; and

2. Semi-structured protocol provides flexibility in data collection, yet it still serves as a framework that provides participants with all relevant topics.

The semi-structured protocol for this study covers the typical three part structure; introduction, main topics, and closure, and was developed following procedures in a
handbook for focus group research (Debus, 2007, p.25-27) and amalgamated with those of a former study (e.g. Fitzgibbon et al., 2007; Ponterotto, Rivera, & Sueyoshi, 2000). The final versions of the interview protocol in English and Japanese respectively appear in the appendices (see appendix 4A and appendix 4B). The following steps were followed to finalise its design.

1. developed an English version of an interview protocol;
2. reviewed the English version with the researcher’s principal supervisor and a few of the researcher’s colleagues;
3. modified the interview topics and questions based on the feedback from the above-reviewers;
4. held 2 focus groups (1 female and 1 male group) with Australian students;
5. modified the interview topics and questions based on the feedback from the focus groups;
6. translated the English version into Japanese;
7. discussed the equivalence between the English and Japanese versions with the researcher’s associate supervisor who understands both English and Japanese and has extensive experience in qualitative research;
8. added extra information to the Japanese version to enhance the equivalence with the English version;
9. held 4 focus groups (2 females and 2 males groups) with Japanese students;
10. modified interview questions based on feedback from the Japanese focus groups; and
11. completed the interview protocol development for the rest of the Australian focus groups.

4.4 Moderator

The moderator has a great impact on the quality of focus groups (Krueger, 1993). In this study, the researcher facilitated all of the interviews except for that with the first group with Australian students. The moderator was always aware of allowing the discussion to be as natural and as open as possible by smiling, behaving with courtesy, and making the
best effort to build rapport between the moderator and participants. Although a good moderator should be a good listener, additional verbal encouragement to Japanese participants was needed for stimulating them to expand on their own experiences and opinions. To avoid giving wrong cues to participants by the moderator’s response, the researcher as moderator tried to use as many neutral words as possible, such as “Okay”, “Thank you”, and “I see” in English and “NARUHODO” and “SOUDESUKA” (which mean “Uh huh”) in Japanese.

To play the role of a moderator appropriately, the researcher was also aware of sources of error and bias that would destroy reliability and validity of qualitative data provided by focus group participants. For a moderator, bias would be unethical. For example, during the interviews, an unethical moderator would try to force participants to express desired opinions, or he/she would interpret the data as he/she wants. For participants, the most likely bias would be social desirability. Participants generally tend to give socially desired answers to make them look good to others. To minimise those problems, the researcher paid careful attention to setting up the interviews, repeating ‘there is no right or wrong answers, so please frankly tell me your own opinions’ to the participants, and avoiding the use of pre-determined remarks continuously.

4.5 Conducting Focus Groups

Four focus groups, each comprising five to seven of the 23 Japanese participants (12 females and 11 males), were held between the 4th and 6th of August, 2008 at a university in the northern part of Honshu, Japan. Six focus groups, each with two to six of 25 Australian participants (12 females and 13 males), were implemented between June 4th and October 24th, 2008 at a university in Western Australia. All participants were in the age range of 18 to 23 years and enrolled in the universities where the focus groups were interviewed. The duration of these ranged from 40 minutes to one hour. Japanese participants were recruited with cooperation of a Japanese professor and his student at the university in Japan. Recruitment of Australian participants was achieved with the cooperation of the researcher’s principal supervisor, the researcher’s affiliated school and PhD colleagues, and the Survey Research Centre at the researcher’s university. A letter of invitation was provided initially by hand or e-mail to each provisional participant with a
follow-up reminder in person, by telephone or by e-mail one day before the actual focus group interview date. The recruitment process in Japan was successful, but additional efforts were needed to recruit Australian university students and to conduct the focus group interviews because:

- Students were disinterested in being engaged with focus groups;
- Availability of interviewees' time for focus groups was very limited;
- “No-show rate” was high; and
- A mixed-gender group unexpectedly emerged.

Consequently, additional groups of Australian students were recruited and the focus group protocol administered. After six Australian focus groups had been conducted, interviewing processes were terminated as the data collected from the six groups were found to have reached a saturation point, that is, no new relevant information was deduced. Table 4.1 shows characteristics of the focus groups and the number of participants.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Ethnicity</th>
<th>Gender and number of participants</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Australians</td>
<td>4 males</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Australians</td>
<td>3 females</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Australians</td>
<td>5 females</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Australians</td>
<td>4 females &amp; 2 males</td>
<td>6 groups consisting of 12 females and 13 males</td>
</tr>
<tr>
<td>5</td>
<td>Australians</td>
<td>2 males</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Australians</td>
<td>5 males</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Japanese</td>
<td>5 males</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Japanese</td>
<td>5 females</td>
<td>4 groups consisting of 12 females and 11 males</td>
</tr>
<tr>
<td>9</td>
<td>Japanese</td>
<td>6 males</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Japanese</td>
<td>7 females</td>
<td></td>
</tr>
</tbody>
</table>

Total 10 groups (24 females and 24 males)

Note. All participants were undergraduate students aged between 18 and 23 years

Interviews with Australian students were conducted in a meeting room at the university library in Western Australia, and interviews with Japanese students were held in a lecture
room of a university in Japan. The first group with three Australian females was facilitated by the researcher’s principal supervisor in the presence of the researcher; the remaining nine groups were moderated by the researcher. Interviews with Japanese students were conducted in Japanese and interviews with Australian students proceeded in English. With the participants’ permission, all interviews were recorded by two digital recorders to ensure the accuracy of data collection and for later analysis. To minimise any participant discomfort from implementing the recording procedures, the researcher selected the smallest recording devices possible, positioning them so as to be unobtrusive. The moderator, in accordance with group interview best practice (Debus, 2007) also took precautions to make participants feel relaxed and comfortable by, in the interview introduction, encouraging them to express their experiences, opinions, and feelings without any hesitation and by providing them with refreshments. Additionally, Australian interviewees were offered an AUS$20 gift voucher, or its equivalent in Japanese yen to Japanese participants, on completion of the particular focus group interviews. For maximising and ensuring confidentiality, all participants were advised by the moderator not to canvas any aspect of the focus group interview; and to ensure anonymity of the views and opinions expressed, the moderator did not mention participants’ names during the interviews. However, for minimising risks associated with the traditional opinions of the existence of a ‘yes-men’ culture among Japanese, the moderator made extra efforts to encourage Japanese participants to express their own opinions and feeling rather than expressing socially desirable answers. Ueno (2004), an expert at interviewing Japanese participants, suggested that for minimising problems arising because of the perceived ‘yes-men’ culture, moderators should call participants by name and should remind them to express their opinions and feelings by repeatedly saying, “How about your opinion, Mr. (Ms.) X?” However, instead of calling participants by name, in this research, this researcher-moderator repeatedly probed, “How about YOUR opinion?” accompanied by eye contact with individual Japanese participants.

The interview questions were originally planned to begin with the following three simple “pen and paper” questions:

1. In some countries, government has been involved in activities for solving social issues more than the Australian Government does. What do you think about the government being involved in issues such as these?
2. After showing a poster for 3Rs: reduce, reuse, recycle made by the Australian Government and the Japanese Government to the participants in the respective ethnically homogeneous focus groups, this query was proposed: How do you feel about being told what to do by the 3Rs of this poster?; and

3. Do you know of any other social campaigns like 3Rs?

The topics around social marketing dealt with in the research were deemed to cause some confusion for participants because of their relative unfamiliarity in participants’ daily lives. Accordingly, “pen and paper” questions were to be employed as it was expected that they would arouse participants’ feelings, giving them a chance to organise their opinions before starting the respective focus group discussions. However, after conducting two Japanese group interviews, the moderator found that Japanese participants felt extremely uncomfortable with the “pen and paper” questions. This happened probably because such written questions had them feel as though a formal written examination was being administered to them. Therefore, this aspect of the focus group interview protocol was eliminated for the remaining two Japanese groups. That discomfort was not found among Australian groups; however, the “pen and paper” questions were also omitted for one of the Australian focus groups with mixed-genders because most of the participants turned up very late and so that a shorter interview was needed to meet the planned session completion time.

‘Recycling’ was chosen as a specific government-sponsored social marketing topic for the focus group interviews for the following two reasons: it was deemed that recycling would be a less controversial topic than other well-known social topics, such as anti-smoking and anti-drug use; and that all the participants would be familiar with recycling as a social topic since social marketing for recycling had been well developed in both Australia and Japan. As discussed in chapter 2, previous study has suggested that meanings of the word ‘jiyū’ in Japanese (a translation of the English word ‘freedom’) may differ from Australian interpretations, and this was confirmed through focus groups. Hence, the moderator briefly explained general perceptions of freedom in Australia to Japanese participants so that discussion about individual freedom with them was expected to smooth differences or similarities of the meanings between the Japanese and Australian interviewees.
4.6 Data analysis

Qualitative data analysis in this study began at the commencement of data collection. The data already gathered were first tentatively analysed. And based on a temporary hypothesis from this initial data analysis, the researcher refined interview topics and questions for further data which were more focused and thus of better quality. This approach is referred to as sequential analysis (Becker, 1977; Miles & Huberman, 1994), thereby allowing the researcher to formulate more appropriate questions which provide a deeper understanding of relevant topics. This study refined the interview protocol three times during data collection for enhancing probing of key topics. This was achieved after obtaining preliminary responses from the researcher’s principal supervisor and colleagues, after conducting two interviews with Australian students, and after administrating four interview protocols to Japanese students.

Data analysis is a personal process subject to unintended bias; thus a researcher must attentive to objectivity as an important bias-limiting factor (Bazeley, 2007). To foster objectivity, all processes of the data analysis, including the above-mentioned analysis during the data collection period, were continuously reviewed until a consensus between the researcher’s principal and associate supervisors as well as the researcher herself was reached. These processes were recorded in writing, analytical memos being used, and the proceedings of case analysis meetings analysed. These methods minimised the researcher’s subjectivity and bias. Objectivity in the data analysis was also enhanced by using qualitative software programs considered useful for storage, coding, comparing, and linking the data. NVivo 8, after review of alternatives, was decided to be the most useful tool as it allows the researcher to work with and analyse documents not only in English but also in Japanese. This feature gives bilingual study extreme advantages. However, such programs do not analyse the data (Patton, 2002); human beings must decide themes and group and interpret the data. Therefore, the main purpose for using the program was to improve the accuracy of data sorting and to speed up analysis.

Figure 4.1 shows the data analysis pathway of five levels used for the present study, based on Miles and Huberman (1994). Multiple methods were utilised in all processes for
improving the credibility and reliability of data analysis and the validity of hypothesis development. This diagram was applied to both Australian and Japanese data analysis so that procedural equivalence of the data analysis between the two was maintained. The five levels in the process are identified and explicated next. Details of results at each level are presented henceforth in section 4.7 of this chapter.
Collecting data

Level 1 Making contact summary

Level 2 Transcribing interview

Level 3 Summarising data

Level 4 Analysing major themes in data with matrix Coding the data

Level 5 Searching for relationships in data

Developing hypotheses

Identifying patterns in the coded data

Trying out coding categories to find a set that fits

Creating a text to work on

Repeating until reaching agreement among the researcher, principal supervisor, and associate supervisor

Writing analytical memos

Having case analysis meeting with the principal supervisor and associate supervisor

Figure 4.1 Schematic diagram of five levels in the process of data gathering and processing (after Miles & Huberman, 1994)
Level 1 Making contact summary sheet

A contact summary sheet is a single sheet that summarises each group interview including brief profiles of participants, number of participants, contact data, location, and main points emerging from an interview. The sheet is very useful for gaining general ideas from each group interview and drawing a framework for further analysis. In this study, after every group interview, the sheet was completed.

Level 2 Transcribing interview data

The digitally recorded data was transcribed into Word text, which NVivo 8 could import, in two ways. The digitally recorded data of Japanese participants were transcribed by the researcher; however, the data for Australian participants were transcribed by a professional transcriber. Bird (2005) emphasised the importance of transcribing by the researcher him/herself as transcription is a part of data analysis. However, considering that English is the second language for the researcher, and that the researcher was the interviewer, it was concluded that using a professional transcriber for English data was appropriate. Both the Japanese and English data was transcribed, using the same format including font, styles, and paragraph, and speakers were identified. The researcher reviewed and edited transcriptions in English completed by the transcriber several times while listening to the original recording. It was expected that, if the collected data in Japanese were translated into English at this level of the data analysis, the context and deeper meanings of words would be lost. Hence, the data collected from Japanese participants were analysed by maintaining the original language until drawing conclusions in the qualitative data analysis phase.

Level 3 Summarising the collected data

The data transcribed into texts were summarised by coding analysis based on topic codes. Coding in this study began with the reading of the transcriptions several times. After perusing them, coding analysis selected relevant texts to the study purposes and classified them according to descriptive codes (or labels), based on similarities of meanings and topics in the text for later retrievals using NVivo 8. The codes for the Australian and Japanese data were created separately initially using different languages: English for the

\[\text{\footnotesize \cite{Bird} 2005}\]

To avoid distracting readers, all statements made by Japanese participants are reported only in English in the text. The data of the original language is kept by the researcher. Or see appendix 5C for examples of the coded statements in Japanese.
Australian data and Japanese for the Japanese data. After these processes, the Japanese codes were compared with those for Australians and translated into English. The Australian and Japanese data used the same English codes when they shared similar concepts, based on the Australian codes; however, new English codes were created for unique concepts indentified from the Japanese transcriptions.

**Level 4 Analysing major themes**

The data derived and coded in the level 3 were grouped in accordance with their common themes and patterns. This process is called pattern coding (Miles & Huberman, 1994).

**Level 5 Searching for relationships in data**

At this level, various frameworks that constructed a concept of the readiness to accept government-sponsored social marketing activities were built and compared in relation to values allied with individual freedom, based on the data grouped at the level 4. However, unlike a grounded theory whose main purpose is to build a theory (Charmaz, 2006), qualitative research in this study initially aimed to find the most logical framework for quantifying a concept of readiness to accept government-sponsored social marketing activities and values related to the freedom of the individual for the sequential quantitative research.

### 4.7 Results and Discussion

In sections 4.7.1 to 4.7.4 below, the results of the each of the five levels of data analysis are presented and discussed.

#### 4.7.1 Level 1 Analysis of summary sheet

The contact summary sheet (see table 4.2) showed that despite Japanese negative attitudes towards government, participants supported government’s involvement in social marketing activities. This appeared to indicate that general attitudes towards government were unlikely to correlate to these attitudes being involved in social marketing activities. Therefore, it was reasonably assumed that general attitudes towards government would not be a key element in the concept of readiness to accept government-sponsored social marketing activities.
Table 4.2
Summary Sheet of Focus Group Interviews

<table>
<thead>
<tr>
<th>Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Mixed</td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>Australian</td>
<td>Australian</td>
<td>Australian</td>
<td>Australian</td>
<td>Australian</td>
<td>Australian</td>
<td>Japanese</td>
<td>Japanese</td>
<td>Japanese</td>
<td>Japanese</td>
</tr>
<tr>
<td><strong>No of participants</strong></td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4F &amp; 2M</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Contact date</strong></td>
<td>04 June 08</td>
<td>04 June 08</td>
<td>16 Oct 08</td>
<td>22 Oct 08</td>
<td>23 Oct 08</td>
<td>24 Oct 08</td>
<td>04 Aug 08</td>
<td>05 Aug 08</td>
<td>06 Aug 08</td>
<td>06 Aug 08</td>
</tr>
<tr>
<td><strong>Site</strong></td>
<td>WA</td>
<td>WA</td>
<td>WA</td>
<td>WA</td>
<td>WA</td>
<td>WA</td>
<td>Fukushima</td>
<td>Fukushima</td>
<td>Fukushima</td>
<td>Fukushima</td>
</tr>
<tr>
<td><strong>Pen &amp; paper answers</strong></td>
<td>Collected</td>
<td>Collected</td>
<td>Collected</td>
<td>N/A</td>
<td>Collected</td>
<td>Collected</td>
<td>Collected</td>
<td>Collected</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>General attitudes towards government</strong></td>
<td>Positive</td>
<td>Positive &amp; Negative</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Negative</td>
<td>Negative</td>
<td>N/A</td>
<td>Negative</td>
</tr>
<tr>
<td><strong>General attitudes towards government being involved in social marketing</strong></td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td><strong>General attitudes towards social marketing campaign sponsored by government</strong></td>
<td>Positive</td>
<td>Positive &amp; Negative</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
<td>Positive &amp; Negative</td>
</tr>
</tbody>
</table>
4.7.2 Level 2 Analysis of transcription

Reviews of the transcriptions revealed that:

1. Saturation points for both of the Australian and Japanese data were reached on opinions about relevant topics;

2. Free and open responses were expressed as participants gave their own opinions, feelings, and experiences without any discomfort, although a relatively dominant participant was seen in one of the Australian groups;

3. Negative responses were not apparent across groups except when one participant strongly disagreed with the idea of government being involved in social marketing activities. However, it was concluded that negative responses from one person would be good enough for analysing negative attitudes, considering the fact that few people with negative attitudes were expected to involve themselves in the research. Additionally, those with negative attitudes would be in the minority among university students both in Australia and Japan. As the proof of this, other participants in the group showed astonished reactions towards any negative thoughts expressed;

4. Reliability and dependability was assured by precautions previously noted appropriate to the reliability and dependability of the collected data; and

5. The extent of the ethnic-based view was revealed when the Australian participants expressed their opinions from a broad view perspective, including social and financial situations, and philosophy. In contrast, Japanese participants tended to express their opinions from narrower views, based on their close communities such as families, their Alma Mata university, and in terms of their immediate past or present.

4.7.3 Levels 3 & 4 Coding analysis

4.7.3a Level 3 First-level coding

Coding analysis at level 3 was ‘first-level coding’ (Miles & Huberman, 1994) that aimed to summarise segments of the data. Careful perusal of the text indicated possibilities of more than 30 codes at the outset; however, the repeated processes of summarising the
data ultimately generated 18 English codes for both the Australian and Japanese data. Table 4.3 outlines these 18 codes (see the second column) with their definitions and focus groups from which the coded statements were derived (see appendix 4C for the full code summary with statements made by the participants). This first-level coding analysis broadly grasped that:

- Unprompted discussions revealed that the Australian and Japanese participants considered similar aspects about government-sponsored social marketing activities, despite the fact that the researcher-moderator guided the discussions on the topic of the activities with little prompting; and

- Prompted interventions revealed a distinctive difference between Australian and Japanese perceptions of individual freedom and social harmony.
### Table 4.3
Summary of Codes and Group Occurrences

<table>
<thead>
<tr>
<th>Pattern codes</th>
<th>First-level codes</th>
<th>Definitions</th>
<th>Group Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAXPAYERS’ MONEY</td>
<td>Taxpayers’ money</td>
<td>- opinions about appropriateness of using taxpayers’ money used for Gov’t-sponsored SM activities</td>
<td>1 2 3 4 5 6 8 10</td>
</tr>
<tr>
<td></td>
<td>Effectiveness of taxpayer’s money</td>
<td>- Opinions about how effective taxpayers’ money is used for Gov’t-sponsored SM activities</td>
<td>1 2 3 4 5 6 8 9 10</td>
</tr>
<tr>
<td>EFFECTIVENESS</td>
<td>Credibility</td>
<td>- Opinions about Gov credibility as a SM sponsor</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Characteristic of issues</td>
<td>Effectiveness of Gov’t SM campaigns</td>
<td>- Opinions about effectiveness of Gov’t-sponsored SM campaigns</td>
<td>2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>CHARACTERISTICS OF ISSUES</td>
<td>Immediacy</td>
<td>- Opinions about degree of issue’s urgency</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Characteristics of outcomes</td>
<td>- Opinions about the effects of the characteristics of possible outcomes</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>MOTIVATION</td>
<td>Motivation</td>
<td>- Opinions about Govt’s motivation to be involved in SM activities</td>
<td>1 2 3 4 5 6 8 10</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>Education</td>
<td>- Opinions about Govt’s educative SM approaches including the means of providing information</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>PROMOTION</td>
<td>Ability</td>
<td>- Opinions about skills and facilities to perform or not, recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Easiness to execute</td>
<td>- Opinions about ease of performing or not, recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
<td>- Opinions about effects of participants’ environment s on performing or not, recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>PATERNALISM</td>
<td>Hedonism</td>
<td>- Opinions about effects of pursuance of pleasure on performing or not, recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Individual benefits</td>
<td>- Opinions about effects of individual benefits including emotional benefits on performing or not performing recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>GOVERNMENT</td>
<td>Control</td>
<td>- Opinions about Govt’s intrusive approach</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Social norms</td>
<td>- Opinions about effects of social norms on performing or not, recommended behaviours</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>Regulations</td>
<td>- Opinions about Govt’s regulative approach</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>VALUES</td>
<td>General attitudes toward Government</td>
<td>- General opinions about the Government</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>* Values</td>
<td>- Values related to individual freedom</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

**Note.** SM = social marketing, Gov’t = Government, 123456 = Australian groups, 78910 = Japanese Groups

* = Topics indicated by the moderator to all groups
The findings at the first-level of coding suggested that:

- Readiness to accept government-sponsored social marketing activities could be measured in the same framework, by the same items for both Australian and Japanese university students;
- Australian and Japanese values related to the individual freedom would need to be defined separately and more clearly; and
- Participants also viewed individual freedom in comparison with social harmony; therefore, while their definitions of values would different, emphasis trends of the values in each group could be measured by using two key terms, individual freedom and social harmony.

Two first-level codes mentioned by only Australian or Japanese participants were included in the final 18 codes because:

- Although reference to ‘hedonism’ was only mentioned by a female Japanese, this seemed to represent particular situations; and
- A code ‘control’ was allocated only to statements made by Australian participants; however, it was reasonably assumed that the statements of control would reflect the individual freedom notions of the Australian participants.

The basis of the above summaries is discussed in more detail under headings of the 18 first-level codes each below. Groups are mentioned with ethnicity and gender where appropriate, using abbreviation labels for the sources as follows: AF= female Australian groups, AM= male Australian groups, JF= female Japanese groups, JM= male Japanese groups, AFM= mixed gender Australian group); however, opinions are not individualised by participant. Direct quotations from focus group interviews are shown in italics and single quotation marks,

**Appropriateness of use of taxpayers’ money**

All of the Australian groups (AF, AM, AFM) and two Japanese groups (JF) reported appropriateness of use of taxpayers’ money for government-sponsored social marketing activities in relation to the importance of the respective government’s involvement in social marketing activities. The focus groups, on the whole, supported the use of taxpayer’s money for government-sponsored social marketing activities. However,
questions about the appropriateness for anti-smoking, anti-obesity, or anti-alcoholic drink campaigns were also raised by male groups. One Japanese group (JF) disagreed with the idea of taxpayers’ money being used for anti-smoking campaigns, because ‘it is already unfair to spend our money on supporting medical bills for smokers who voluntarily harmed their health’. Similarly, one participant of the Australian group (AM) commented ‘Personally, I don’t smoke, I’m not obese, and I actually don’t drink alcohol. So to me that’s my money being wasted in a sense because I don’t have any of those problems’. A difference between these statements was that the Australian participant, at the same time, added 'but having said that, I think it’s important to make these sorts of ads [social marketing advertisements]... because it is important and it benefits the entire community'.

**Effectiveness of use of taxpayers’ money**

Although eight of the 10 focus groups agreed with the use of taxpayers’ money for government-sponsored social marketing activities, they also mentioned an essential condition for their agreement, commented upon as spending taxpayers’ money on social issues being important ‘only if it’s actually working’ (AM), or ‘unless it’s beneficial to all generations’ (JF). Therefore, if no information about the effectiveness of expenditure of funds is provided by government, people would ‘guess our money has been wasted’ (JF). From these comments, it can be assumed that the effective disbursement of taxpayers’ money may have direct impacts on the participants’ perceptions about appropriate use of taxpayers’ money, with indirect impacts on perceptions about the appropriateness of government being involved in social marketing activities.

**Credibility of government as a social marketing sponsor**

All of the focus groups recognised the government as an important party that should plan and implement social marketing activities, even though no Japanese groups made a positive comment on their government and its social marketing activities. For example, one participant (JF) reported ‘if someone has to do something at the national level, the government is the only party to make it real’. This was similarly reported by the Australian groups: ‘The government exercises more leadership towards it [solving social issues] so you don’t feel like you’re doing it alone, like you’ve got the government behind you so you think it’s probably right to do’ (AF). These comments indicated that government is expected to play a role as a national leader in both Australia and Japan.
This expectation was clearly described by the Australian (AM) and Japanese groups (JM) as ‘the government should be a role model to the rest of the population’ and ‘if the government emphasises its involvement in those campaigns [for solving social issues], we would have an awareness like “we also must do something because the government puts in serious efforts to tackle this problem”’.

**Effectiveness of government-sponsored social marketing activities**

It seemed logical to think that effectiveness of existing government-sponsored social marketing activities could affect the credibility of government as a social marketing sponsor. However, contradictions between the effectiveness and the credibility were reported by both the Australian and Japanese groups. One Japanese participant supported the government as a major social marketing sponsor, but qualified its social campaigns, saying, ‘are a mere formality, and there is nothing we can actually utilise them’. Similarly, Japanese groups (JF, JM) also reported ineffectiveness of the campaigns because ‘government-sponsored social marketing campaigns have not penetrated into our lives’ and because ‘I am not even aware that the government has been involved in social marketing campaigns’. The Australian groups also had negative views about the effectiveness, even though they agreed that the government should lead in this matter. One Australian group (AM) criticised the government’s social marketing activities, saying ‘most people think the governments are dickheads, pretty much…Sorry but you kind of just go…same old thing’, because ‘the government will say one thing and the opposition will say another thing, they’re always trying to contradict each other, that’s when it gets annoying’. However, satisfaction with the government’s efforts was also reported by a couple of the Australian groups, saying, ‘the government is doing ok actually’ (AFM); and ‘we’re pretty well looked after by the government in regards to our health and other people’s health at the same time’ (AF); or ‘I’m pretty happy with the government when you look at other governments around the world’ (AM). From these reports, the researcher’s assumption is that the participants’ judgements on the effectiveness of government’s current activities do not necessarily determine the degree of their thinking about credibility of their government as a major social marketing sponsor. However, the participants probably believed that governments had responsibilities in solving social issues in order to implement social marketing activities effectively.
Immediacy

When the matter of their government being involved in social marketing activities was discussed in the focus groups, nine of the 10 groups commented on the degree of immediacy of the issue being addressed by the governments. For example, one Australian group (AM) emphasised the immediacy regarding timeliness, saying ‘now rather than what’s going to happen in the future ... it’s too far away to think about’ and similarly another Japanese group (JM) also reported ‘many people probably feel that environmental destruction is not their problem, because it won’t affect them while they are alive’. The participants’ sense of immediacy in association with their life’s interests was also expressed as, ‘I am more interested in issues that are more strongly associated with my life’ (JF); or ‘I don’t want someone to tell me what I can do when it comes to my own family so it’s a hardline to draw’ (AM). The interesting finding in these two comments was that they talked about the same topic; however, their views were totally opposite.

Characteristics of outcomes

Several characteristics of the outcomes resulting from adopting recommended behaviours relating to the government’s involvement in social marketing activities were reported by all groups. In summary they opined that government should be involved in activities for solving social issues only when carrying out recommended actions which ultimately results in worthwhile social benefits for all. Therefore, when people cannot see the results clearly, they may feel ‘each individual has too little power to achieve the goals’ (JF); and ‘don’t smoke or you’ll die, exercise or you’ll die, stop drink driving or someone else will die, have kids...or what?’ (AM).

Motivation

To all the Australian groups, it was important ‘to understand the motives behind what they [the government] are doing’ (AM), because government does not necessarily plan and implement social marketing campaigns purely for good of individuals and societies. For example, the Australian Government ‘needs to use these campaigns in order to show the public that they’re actually doing something to get re-elected’ (AM); and ‘have their own agenda’ (AM). Two Japanese groups (JF) also presented these cynical perceptions toward the Japanese Government. In one of the groups, the government’s motivation for heavier tobacco taxation was questioned because ‘the government wants to keep the
health care cost down but wants to secure its revenue. Isn’t this picture wrong?’. However, compared to commercial organisations’ which have ‘money driven’ motivations, a government’s motivation was perceived more ‘lifestyle driven’ (AM). On the whole, despite the cynical reports, the groups appeared to perceive that their governments probably had genuine motivations for social marketing as they were ‘highlighting the awareness of looking after the people’ (AF).

Education

All the groups commented upon their government’s educational social marketing approaches with both criticism and praise. In this study, the educational approaches are considered as transparent efforts that give the audience information about the recommendations for an issue, but leave it to them to decide on the adoption of the recommended behaviours. As discussed in chapter 2, the educational approaches have been the main strategic tool for the Australian Government, and the Australian focus groups confirm that the educational approaches were accepted because ‘if information is not coming from a government department it may not true. It’s not as reliable. Not as trustworthy’ (AF). The public seem to believe that it is responsibility of the Australian Government to ‘educate the public’ (AM). On the contrary, the Japanese groups showed their dissatisfaction with the Japanese Government’s educational approaches although they did not deny the intentions. For example, one group (JM) suggested ‘it is more likely that people respond well to a message if presented in a conscientious manner’; while another group (JF) criticised the Japanese Government’s approaches to educational policy because ‘the government always adopts scare tactics’. Similar comments were also made by the Australian groups; however, analysis of the comments on educational approaches clearly found that the Australian participants were more accustomed to the educational policies of the Australian Government; however the Japanese participants had little experience with similar governmental methods.

Ability

Three Australian groups (AF, AM) and two Japanese groups (JF, JM) reported the necessity for skills and facilities to perform behaviours recommended by the governments. One female Australian participant used to recycle; however, she stopped doing that because ‘we don’t access recycle bins where I am now’. Similarly, one female Japanese participant showed a strong intention to use eco-bags ‘if there are rental
eco-bags or eco-baskets at a super market’. That is, ‘it can be frustrating’ for the participants if they ‘feel they should be able to do something but they are not sure how’. The ‘Find Thirty ® Everyday’ campaign, which recommends that people find just thirty minutes every day for exercise, was referenced by the Australian participants as a good example of recommended socially desirable behaviour because they 'like the idea of not having to go to gym to stay healthy. We can do 30 minutes!'.

**Easiness to execute**

Five Australian groups (AF, AM, AFM) and three Japanese groups (JF, JM) reported that if they ‘know it is easy to start the behavioural modification’, they would give it a try. For example, it is ‘too hard’ for the one female Australian participant to wash out her milk cartons before putting them in the recycle bin. Consequently, she just disposed of her cartons ‘in with the other rubbish’. She described herself as ‘I’m pretty lazy eh?’ in jest. This attitude was also found among the Japanese participants. They knew the importance of adopting socially desirable behaviours; however, for them ‘it is really troublesome to do so’. Therefore, simplicity and ease of accomplishing recommended behaviours appeared to be the important factor for the participants as to whether they would adopt a particular behaviour or not. This importance is summed up in the short and clear statement by the female Australian participant: ‘I think convenience is the biggest thing to do with recycling’.

**Environment**

‘Easiness to execute’ talks about individual efforts on the one hand; on the other hand, ‘environment’ is related to others’ efforts to help individuals adopt recommended behaviours. Four of six Australian groups (AF, AM, AFM) and three of four Japanese groups (JF, JM) suggested they would perform a recommended behaviour as long as the appropriate environment is provided for the behaviour. One female Australian participant said ‘it’s harder to recycle than not to do it’ unless she has recycle bins next to a normal bin. This statement indicated that an appropriate environment could help or discourage involuntary behavioural change, as suggested by Donovan and Henley (2003). For example, one male Australian felt annoyed when he had to ‘put a phone book in a normal bin, because there was no room in the recycle bag’ even though he had an intention to recycle, ‘it is quite important to maintain appropriate environment to put a plan in practice’ (JM) for governments.
Hedonism

This code was applied to only statements made only by one female Japanese participant. However, her statements appeared to include important aspects of hedonistic attitudes, such as addictive smoking and drinking. According to the participant, ‘a ban on drinking would be an unwelcome measure for me, because I love drinking’. This sentence could easily rephrase, for example, ‘a ban on drug taking would be an unwelcome measure for me, because I love drugs’; or ‘a ban on sewing would be an unwelcome measure for me, because I love craft’. These examples indicate it is not easy to control individual behaviours if they are at one with individual pleasure.

Individual benefits

Although four of six Australian groups (AF, AM, AFM) also reported individual benefits as an important factor for performing a recommended behaviour, the necessity for individual benefits was discussed and emphasised additionally by all the Japanese groups (JF, JM). Female Japanese participants flatly said, ‘We Japanese demand benefits. We do not like losses’; and ‘I really want to see some kind of return for adapting my behaviours’. The male Japanese groups were adamant too, they ‘want to see some kind of reward even for a small effort’ because ‘after all, everyone thinks himself or herself first so far’. Both the Australian and Japanese groups were sensitive to costs if they adopt a recommended behaviour; however, the Japanese groups were more focused on rewards than their counterpart.

Control

Control by the government was only reported by the Australian groups in discussion about government-sponsored social marketing activities. The control was described as ‘intrusive’ (AF); ‘a flood of TV ads with “you should do this and you should do that”’ (AF); ‘an authoritarian government’ (AF); ‘over-control everyone’ (AF); and ‘dictatorship-style’ (AM). All focus groups expressed negative opinions about these controls; but the Australians groups’ attitudes ‘are much more laissez faire’ (AM) than other countries. Therefore, if the perceived unacceptable control occurred in Australia ‘there would be trouble’ (AM).
**Social norms**

Three Australian groups (AF, AM, AFM) and one Japanese group (JF) reported that social norms would affect their decisions as to whether they should or should not engage in recommended behaviours. One female Japanese participant said, “I am rather worried about what people think” if her behaviour did not conform to that recommended. Social norms appeared to function negatively, too. For example, “there’s a lot of negative feelings about recycling that gets pushed on us” (AF) even though she and her families “recycle ridiculously”.

**Regulations**

All focus groups agreed that a regulation is necessary for an orderly society, because “without government and without police enforcing the law, it would probably be a madhouse” (AM). However, at the same time, the Australian groups expressed concern about the mandated boundaries of regulations because Australians “are too individual and especially in Australia with our multiculturalism, if you tried to do that [regulate the people], it just wouldn’t mesh” (AF). One male Australian participant, in particular, had an extremely negative opinion about the Australian Government. He described the government as “a money-making machine but also a money-spending machine”, concluding that regulating anti-social behaviours like speeding “comes down to money”.

Compared with the Australian groups, the Japanese groups, contrariwise, expressed stronger support for regulations by governments, in that, “in order to maintain a social order, the Japanese Government should impose regulations to a certain extent despite the fear of compromising the lifestyle of some individuals” (JM); and “Japanese people have a tendency to assent to anything placed by higher authorities” (JF). Although both the Australian and Japanese groups generally accepted government regulations, their acceptance differed by degree.

**General attitudes toward government**

All groups, except for one Japanese male group, gave opinions about general attitudes towards their governments. Interestingly, the other three Japanese groups regarded the Japanese Government negatively. These Japanese participants did not trust the Japanese Government completely because “government’s presence is very remote from our lives” (JF); and “there are no trusting relationships” (JM) between the government and its people. The Australian groups expressed both negative and positive attitudes towards
their government; however, positive opinions about the government dominated over negative opinions. One male Australian participant called the Australian Government “a pretty good government” no matter which party is chosen as “their basic principles seem pretty similar”. A noticeable point was that even though the Japanese groups supported regulations by the government, they did not necessarily support the Japanese Government – a matter that appeared conflicting.

**Values**

Values as related to individual freedom were a topic the researcher-moderator posed during the focus group interviews. However, any definition of “values” was not given to the Australian groups, whereas the word was explained in terms of the general concepts of the individual freedom in Australia to the Japanese groups. The reason for this was the assumption from previous studies (e.g. Doi, 1981; Nakane, 1973) that Japanese university students were not as familiar with concepts of the individual freedom as Australian university students. Despite no explanation being given defining individual freedom, key words related to individual freedom for English speakers, as suggested by Wierzbicka (1997), were posed to the Australian groups. These latter groups agreed a one child policy would not work in the Australian context as it does in China because “that’s my choice” (AF); “someone else can’t tell you what to do with it” (AF); and these matters are related to “personal freedom” (AM) of Australian participants. Therefore, the Australian groups showed respect for the freedom of others, this value being exemplified as “smoking is still smokers’ decision, it’s their right” (AF); and “no one likes having to justify themselves about anything to anyone else” (AF). The following statement appeared to sum up concepts of individual freedom in Australia.

*This is one thing that Australians pride themselves on is having the right to say yes or no. They have the choice and it’s a very Australian thing to do, ‘oh, I don’t want to so I’m not going to.* (AF)

After hearing about these Australian concepts of individual freedom, one female Japanese participant said, “our fundamental concepts of individual freedom are different from Australian’s. We refer to living spontaneously as freedom”. Therefore, for Japanese participants, individual freedom was not necessarily very important because “we have to coexist with others. So if everyone insists on individual freedom, what will happen?” (JF). When the Japanese groups talked about individual freedom, they often referred to social
harmony. One male Japanese participant said, “even if I sacrifice my freedom, I’ll give priority to social harmony”; and another female participant stated, “I will probably jump on the bandwagon”.

4.7.3b Level 4 Pattern coding

Although the first-level coding made the data more manageable, the first-coded data did not have the refinement to explain conceptual structures of readiness to accept government-sponsored social marketing activities, values related to the individual freedom, and their possible relationships. To make the first-level coded data interpretable, the data were grouped into a small number of sets, which identified commonalities of meanings among the data (Miles & Huberman, 1994). The groups were called pattern codes and the far left of table 4.3 shows these pattern codes. Pattern codes in this study were determined in two ways. One was to create pattern codes based on emergent themes from the data that was coded at the first level. The created pattern codes were: ‘Taxpayer’s Money’, ‘Effectiveness’, ‘Characteristics of Issues’, ‘Motivation’, ‘Government’, and ‘Values’.

The second pattern code was to apply existing concepts to the data based on literature: ‘Education’, ‘Promotion’, and ‘Paternalism’. After examining the first-level coded data, the researcher noticed that the participants often talked about how they should be and should not be approached by their governments when they talked about whether they would behave as recommended or not. This finding led the researcher to consider that social marketing methods by government could also be key elements for conceptualising readiness to accept government-sponsored social marketing activities. Donovan and Henley (2003) described three major methods of social marketing as “to educate (information)”, “to motivate (persuasion)”, and “to advocate (socio-political action)” (p.12). Similarly, Rothschild (1999) also suggested that ‘education’, ‘marketing’, and ‘law’ could be major strategies for the management of public health and social issue behaviours. Their definitions of each of the domains were very similar; however, they were different in that Rothschild (1999) viewed ‘marketing’ as the only domain for social marketing while Donovan and Henley (2003) considered education a part of marketing as well as motivation, suggesting all three methods should be comprehensively implemented for a social marketing campaign. After examining both concepts and
applying them to the collected qualitative data, this study found that combination of the two concepts could provide the most applicable framework to the data because:

- While Rothschild (1999) attempted distinguishing social marketing approaches from others, promotion receivers (focus group participants in this study) regarded all of education, marketing, and law as social marketing approaches; and
- Donovan and Henley (2003) emphasised that law itself cannot be a social marketing approach but advocating it can be, for social marketing receivers (focus group participants in this study) law or regulations themselves have more direct impact on them than the process of the advocacy.

Therefore, this study renamed the three methods ‘Education’, ‘Promotion’, and ‘Paternalism’ as the key elements to government-sponsored social marketing approaches. In this study, based on Rothschild (Rothschild, 1999) and Donovan and Henley (Donovan & Henley, 2003), ‘Education’ was defined as a purely informative approach that aims at providing transparent information about a particular issue or behaviour; however, it does not involve any will that tries to change individual behaviours. Whether stimulated by the information or not really depends on an individual. For example, social advertisements could be education. ‘Promotion’ could be described as an approach that encourages people to change their behaviours by providing resources that are needed for the change with information on the situation. Compared with ‘Education’ where information receivers have to find a way of changing their behaviours by themselves, ‘Promotion’ demonstrates what and how the receivers should do so. The ‘Quit Campaign’ (Australian Government, 2009c) is a good example of a promotional approach that provides people not only with information about damage to personal health from smoking but also various resources to quit smoking, including the Quit Hotline. The main concept of ‘Paternalism’ in this study was to pressure people into behaving as recommended. This included legislative force, non-legislative but regulative force, and tacit force. Therefore, this study regarded law and regulations as one of social marketing approaches and pattern-coded them ‘Paternalism’ with ‘Control’. Strictly speaking law or regulations alone cannot be a social marketing approach; however, considering the fact that many social marketing receivers perceive them as paternalistic approaches, law or regulations should be also seen as a social marketing approach from the receivers’ viewpoint.
The further examination of above-mentioned pattern codes suggested that ‘Taxpayer’s money’, ‘Effectiveness’, ‘Characteristics of issues’, ‘Motivation’, ‘Government’ could be grouped furthermore at a higher-level because they all appeared related to government’s involvement in social marketing activities.

From the previous analyses, it was assumed that a concept of readiness to accept government-sponsored social marketing could be divided into four underlying concepts: 1) readiness to accept government’s involvement in social marketing activities, 2) readiness to accept government’s educational social marketing approach, 3) readiness to accept government’s promotional social marketing approach, and 4) readiness to accept government’s paternalistic social marketing approach. This meant that a concept of readiness to accept government-sponsored social marketing activities could be operationalised by measuring the two concepts in form of variables. Variables of the two concepts and processes of variable development are reported later in chapter 5.

### 4.7.4 Level 5 Searching for relationships

At level 5, the findings from the previous level 4 were more closely examined to; 1) deduce possible relationships between the readiness and values related to the freedom of the individual from the findings; and 2) shape a hypothetical framework of the relationships for the sequential questionnaire survey. These analyses were made through repeated discussions among the researcher, the researcher’s supervisors, and an anthropologist in the US who is familiar with cross-cultural study, in order to maximise objectivity of the decisions. The discussions agreed the following points:

- Inconsistency between general attitudes toward the government and general attitudes towards government being involved in social marketing activities within the same participant were often seen, particularly among the Japanese participants. This suggested that the data pattern-coded ‘Government’ (general attitudes towards the government) appeared to have little relation with readiness to accept government-sponsored social marketing activity deduced at level 1. Accordingly, it became justifiable that all data coded ‘Government’ was omitted from further analysis;
Regardless of ethnicity, focus group participants often mentioned government’s educational, promotional, and paternalistic social marketing approaches with their intended behaviours, saying ‘if our government does..., I would behave as recommended’; or ‘if our government does..., I would never behave as recommended’. This indicated that readiness to accept government’s social marketing approaches would play a role as one of the criteria for acceptance or rejection of government-sponsored social marketing messages;

- Concepts of readiness to accept government’s involvement in social marketing activities and government’s educational, promotional, and paternalistic social marketing approaches appeared relevant to a concept of readiness to accept government-sponsored social marketing activities in both Australian and Japanese university students;
- Values related to individual freedom appeared to have some influences on readiness to accept government’s involvement in social marketing activities and on readiness to accept government’s educational, promotional, and paternalistic social marketing approaches in similar ways in both Australian and Japanese university students; and
- Definitions of individual freedom seemed inconsistent between Australian and Japanese respondents; therefore, these would need to be compared carefully and defined more rigidly in the sequential survey questionnaire.

4.8 Hypothetical Relationships

Based on the literature reviewed in chapter 2 and the findings from focus groups, the following hypothetical relationships were formulated:

- Values related to the freedom of the individual are related to readiness to accept government’s involvement in social marketing activities;
- Values related to the freedom of the individual are related to readiness to accept government’s educational social marketing approach;
- Values related to the freedom of the individual are related to readiness to accept government’s promotional social marketing approach;
• Values related to the freedom of the individual are related to readiness to accept government’s paternalistic social marketing approach; and
• If the person’s readiness to accept government’s educational, promotional and paternalistic social marketing approaches meets government’s actual approach, they are likely to accept a message sent by government and behave as recommended. However, on the contrary, if the person’s readiness to accept government’s educational, promotional and paternalistic social marketing approaches does not meet government’s actual approach, they are unlikely to accept a message sent by government and behave as recommended.

4.9 Summary

This chapter presented the outcomes of the exploratory qualitative investigation implemented into Australian and Japanese university students’ concepts of readiness to accept government-sponsored social marketing activities and values related to the freedom of the individual.

Six Australian and four Japanese focus groups were interviewed with outcomes as follows:

• Agreeing with the literature review, values related to the freedom of the individual were likely to influence readiness to accept government-sponsored social marketing activities.
• Readiness to accept government’s involvement in social marketing activities and readiness to accept government’s educational, promotional, and paternalistic social marketing approaches could define a concept of readiness to accept government-sponsored social marketing activities.
• Readiness to accept government’s educational, promotional, and paternalistic approaches were likely to influence actual behaviours, through government’s actual approach.

Based on these findings and existing literature, five research hypotheses were formulated. These hypotheses and the findings in this chapter formed the basis for the sequential phases of questionnaire development and the main questionnaire survey.
Chapter 5: QUESTIONNAIRE DEVELOPMENT

This chapter details how a questionnaire for the quantitative research was developed, based on the findings of the qualitative investigation, in association with concepts derived from the literature review. Justification for appropriateness of the selected procedures is also included.

5.1 Designing Questionnaire

“Designing a question for a survey instrument is designing a measure, not a conversational inquiry” (Fowler, 1993, p. 69). In research, measurement can be defined as “assigning numbers to empirical events, objects or properties, or activities in compliance with a set of rules” (Cooper & Schindler, 2006, p. 309) thereby enabling hypothesis testing or description of broad trends. Designing measurement of variables is quite demanding work because it is associated with errors and because it requires validity and reliability of measures. Cooper and Schindler (2006) cautioned against three major sources of measurement errors that could destroy the validity and reliability for a questionnaire survey as proposed to be implemented here: “(1) the respondent; (2) the measurer; and (3) the data collection instrument” (p.316).

Respondents

Measurement could be affected by characteristics of respondents, such as educational background, ethnicity, and gender. Responses may be also affected by respondents’ physical and emotional factors. For example, exhaustion of respondents caused by a lengthy questionnaire often produces inaccurate responses or high rate of non-responses.
Particular response patterns among several ethnicity groups are also another example of factors that would affect measurement (Cooper & Schindler, 2006).

**Measurer**

Careless data input, wrong statistical calculations, and poor data management are other sources of errors by those implementing the measurement (Cooper & Schindler, 2006). These errors must be avoided because they can be eliminated as long as a researcher takes research steps carefully and prudently.

**Instrument**

Errors in measurement could also be produced by defective instrumentation. For example, use of jargon in questions would cause respondents’ confusion; or ambiguous questions would produce inaccurate responses. A defective instrument would also fail to collect accurate data because of its obscure study focus (Cooper & Schindler, 2006). It is natural that a particular issue is affected by many factors; however, it may be impossible to measure all of the factors. Instead, researchers must delimit their interest into a manageable number of factors and condense them into questions of an instrument.

In order to avoid errors and to improve the validity and reliability of an instrument as completely as possible, the questionnaire for this study was designed, following the procedures presented in figure 5.1. Details of each flowchart procedure are reported in chronological order next.

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**Figure 5.1 Flowchart for questionnaire design** (after Balnaves & Caputi, 2001; Cooper & Schindler, 2006; Punch, 2003)
5.2 Selecting Measurement Scales

Measurement scales associated with statistics and statistical techniques for a study should be selected to meet components of a questionnaire and study goals (Betts et al., 2001). By following this recommendation, measurement scales for this study were selected using the following steps.

Step1. Defining appropriate components of a questionnaire based on the study goals;

Step2. Defining the most appropriate strategies for statistical data analysis; and

Step3. Selecting measurement scales

5.2.1 Components of a questionnaire

Components of a questionnaire must correspond to study goals otherwise something measured in the questionnaire will not provide data that the researcher is interested in (Fowler, 1993; Oppenheim, 2001). The primary goal of this study was to answer the following main question:

How do cultural values relating to the freedom of the individual influence readiness to accept government-sponsored social marketing activities among Australian and Japanese university students aged between 18 and 23 years?

The present study attempted this task through testing research hypotheses formulated from the existing literature and the findings provided by focus groups. The hypotheses were:

- Values related to the freedom of the individual are related to readiness to accept government’s involvement in social marketing activities;
- Values related to the freedom of the individual are related to readiness to accept government’s educational social marketing approach;
- Values related to the freedom of the individual are related to readiness to accept government’s promotional social marketing approach;
- Values related to the freedom of the individual are related to readiness to accept government’s paternalistic social marketing approach; and
- If person’s readiness to accept government’s educational, promotional, and paternalistic social marketing approach meets the actual approaches employed,
they are likely to accept a message sent by government and behave as recommended. However, to the contrary, if the person’s readiness to accept government’s educational, promotional, and paternalistic social marketing approach is not congruent with the actual approach used, they are unlikely to accept this and behave as recommended.

Hence, the components must include:

- values related to the freedom of the individual;
- key elements of a concept of readiness to accept government-sponsored social marketing activities; and
- respondents’ traits, including normal behaviours towards government-sponsored social marketing campaigns

Table 5.1 summarises the components to be included in the questionnaire instrument for this study. In the table, three main components are first described. The initial one, the concept of readiness to accept government-sponsored social marketing activities, has two sub-components as shown in the remaining columns - structure A and B. Structure A describes sub-components designed to be measured by a single-item measurement; while Structure B describes sub-components designed to be measured using a multiple-item measurement technique. The other two components, values related to the freedom of the individual and respondents’ traits, have a single sub-component. Each component is detailed next.
Table 5.1 Components Used for Questionnaire Constructions

<table>
<thead>
<tr>
<th>Components</th>
<th>For structure A*</th>
<th>For structure B**</th>
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<tbody>
<tr>
<td>Readiness to accept government being involved in social marketing activities</td>
<td>Taxpayer’s money</td>
<td>Government’s responsibility for educating people</td>
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<td></td>
<td>Effectiveness</td>
<td>Reliability of information provided by government</td>
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<td></td>
<td>Characteristics of issues</td>
<td>Reliability of government as an information resource</td>
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<td></td>
<td>Motivation</td>
<td>Awakening ability of information provided by government</td>
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<td>Readiness to accept government’s educative social marketing approach</td>
<td>Government’s responsibility for providing ‘how to’ information</td>
<td>Government’s ability for encouraging people to adopt socially desirable behaviours</td>
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<td></td>
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<td>Necessity of incentives provided by government</td>
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<td></td>
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<td>Necessity of social infrastructure provided by government</td>
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<tr>
<td>Readiness to accept government’s promotional social marketing approach</td>
<td>Social expectancy to others</td>
<td>Effectiveness of regulations to achieve social order</td>
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<td></td>
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<td>Acceptance of controlling people to keep social order</td>
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<td>Acceptance of restricting individual choices by government for solving social issues</td>
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<tr>
<td>Readiness to accept government’s paternalistic social marketing approach</td>
<td>Individual freedom to do</td>
<td>Values related to the freedom of the individual</td>
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<td>Individual freedom to not to do</td>
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<td>Individual freedom from being told what to do or not to do</td>
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<td>Individual freedom and effects on others</td>
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<td>Individual freedom and social harmony</td>
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<td>Individual freedom and social good</td>
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<td>Opposite words to a word ‘individual freedom’</td>
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<td>Respondents’ traits</td>
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<td>General attitudes and behaviours towards government –sponsored social marketing activities</td>
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<td>Conformable tendency</td>
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<td>Comparison between social harmony and individual freedom</td>
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Note.  * = Structures measured by a single-item measurement,
** = Structures measured by a multiple-items measurement
5.2.1a Key elements of readiness

As discussed in chapter 4, the qualitative study found four key elements to the concept of readiness: readiness to accept government-sponsored social marketing activities; readiness to accept government being involved in social marketing activities, readiness to accept government’s educational social marketing approach, readiness to accept government’s promotional social marketing approach, and readiness to accept government’s paternalistic social marketing approach. However, the study could not define their structures; therefore, the questionnaire was designed to measure readiness in two ways: measuring the readiness by a single item and then by multiple items. The former corresponds to structure A in table 5.1, which attempted to measure the four readiness elements by a single item for each; four in total; and the latter, to structure B, with multiple items for each readiness; 16 in total.

5.2.1b Values of individual freedom

Eight items relating to the freedom of the individual were generated for the questionnaire as depicted in table 5.1. They included both descriptive questions about the definition of freedom and measurement items because the focus groups revealed that Australian and Japanese university students interpret the concept ‘individual freedom’ differently, and that the concept was not clearly defined in the focus groups. At the same time, values relating to the freedom of the individual had to be quantitatively measured for statistical investigation of relationships between the values and their interpretation of readiness to accept government-sponsored social marketing activities. Therefore, table 5.2 shows the first six components which were designed for the quantitative measurement of the values, based on a study by Wierzbicka (1997). The findings of the qualitative analysis, and the last two components generated a definition of the values.
Table 5.2
Constructs for the Concept ‘Values Related to the Freedom of the Individual’ Used for Questionnaire Contents

<table>
<thead>
<tr>
<th>Components</th>
<th>Values</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual freedom to do</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Individual freedom to not to do</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Individual freedom from being told what to do</td>
<td>✔</td>
<td>or not to do</td>
</tr>
<tr>
<td>Individual freedom and effects on others</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Individual freedom and social harmony</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Individual freedom and social good</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Similar words to a word ‘individual freedom’</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Opposite words to a word ‘individual freedom’</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

5.2.1c **Respondents’ traits**

Respondents’ traits (see table 5.1) were aimed at:

1. distinguishing different cultures appropriately; however,
2. equating the data collected from different cultures maximally; and
3. interpreting the general attitudinal and behavioural tendencies of Australian and Japanese university students towards conformity, values of social harmony and individual freedom, and government-sponsored social marketing activities.

Ethnicity, status and age, in particular, were given careful attention with regard to two aspects of sampling equivalence to minimise bias which had the potential to violate the reliability of multi-group comparisons (Tasaki, 2008). The first equivalence was “sampling selection equivalence” (Tasaki, 2008, p. 36) which is the equivalent degree of representativeness of samples: that is, this equivalence required the collected data through this study to reflect Australian and Japanese cultures suitably. To achieve this equivalence, the study selected ‘a place in where being brought up’, and ‘a language used at home with parent(s)’ as ethnicity essential traits. Details of the determinants of culture and ethnicity have been explained in section 4.2 in chapter 4. However, to enhance the adequacy of those ethnicity determinants, the study set ‘birthplace’ and ‘parent(s)’s birthplace’ as a question to be answered by all respondents. Answers to those questions
would enable the researcher to determine whether or not these demographic items were influential factors in determining ethnicity. Another equivalence was “sampling unit equivalence” (Tasaki, 2008, p. 37) that required equal functions of groups in each society. This study first selected students at a university in Western Australia (WA) as its prospective Australian respondents; therefore, demographically similar university students were selected as Japanese respondents in the Japanese survey. The problem uncovered revealed different age ranges between Australian and Japanese students for equivalent university standards. On the one hand, the age of Japanese university students is concentrated between 18 and 23 years; on the other hand; the 2004 age range of Australian university students in W.A. was spread between 15 and 92 years old. To solve this problem, the study decided to concentrate on a cohort of W.A. university students aged between 18 and 23 years. The reason for this decision was that statistics show more than 50% of all the students at the sample university in W.A. were between 18 and 23 years in 2004 (Edith Cowan University). Hence, it was reasonably assumed that an age range between 18 and 23 years could encompass a major group of university students in both Australia and Japan. After deciding respondents’ status and age, the researcher compared unit equivalence of the two groups in each of their societies. That comparison found that university students were similarly recognised in each of the Australian and Japanese societies, even though their education systems were slightly different. Following the above considerations, the researcher decided that university students in the two cultures were comparable and the data collected would maintain unit equivalence.

### 5.2.2 Statistical analysis technique

Components of the instrument implemented in this study comprised a questionnaire designed to investigate:

1. Whether the key elements of readiness and values, which were found through the qualitative data analysis, appropriately explain the readiness and the values of a larger sample of the population;
2. What key elements explain the concept of readiness most appropriately?;
3. How differently or similarly do Australian and Japanese university students perceive the concept of ‘individual freedom’?;
4. Whether and how the values are correlated to the concept of readiness; and
5. How trends of the concepts of readiness and values are related in terms of their similarity to or difference from Australian and Japanese university students.

Each enquiry had its prerequisite conditions and required appropriate statistical techniques. Summarising the conditions and requirements, the researcher concluded that the study needed to employ statistical techniques that enabled examination of:

- appropriateness of the structure ascribed to readiness;
- relationships between values and readiness; and
- differences or similarities which are manifest between Australian and Japanese respondents.

After reviewing a variety of statistical techniques, the researcher determined that descriptive analysis, exploratory factor analysis (EFA), confirmatory factor analysis using structural equation modelling (CFA), and multi-group mean and covariance structure (MG-MACS) analysis would be appropriate. Details of the each approach are addressed in section 5.6 of this chapter (pilot study) and chapter 6 (main study).

5.2.3 Selecting measurement scales

Although the statistical techniques selected for this study allowed for both lower level and higher level measurement by the scales, the researcher was convinced that the higher level of scales should be used for as many items as possible, since the higher level can be converted to lower level if necessary. Consequently, 5-point-Likert scales were selected for items related to the concepts of values and readiness, while nominal scales were selected to measure the respondents’ traits. Strictly speaking, Likert scales are an ordinal scale; however, Likert scales with above five points are practically treated as interval scales in a wide range of academic and practical fields (Tabei, 2005). Therefore, this study also regarded 5-point-Likert scales as interval scales. Another reason why Likert scales were selected for this study was the advantage that they suit measurement of multiple-variables (Bryman & Cramer, 1990); this was the case for readiness (table 5.1: structure B) in this study.
5.3 Developing Measurement Items

The wording of items was first developed in English by the researcher, based on the findings from the qualitative data and existing literature analysis. As the efficacy of survey items generate the quality of measurements being made (Fowler, 1993), the researcher developed them, bearing in mind the suggestions made by Fowler (1993), Oppenheim (2001), and Cooper and Schindler (2006);

- Contents and questions should correspond to the study goals;
- Questions should ask about something that respondents have experienced;
- Questions should not ask respondents about causality;
- Each question should ask one question at a time;
- Questions should reflect general situations of the population;
- Questions should use shared vocabulary; and
- Questions should call the respondents’ attention to answer.

Although the questions were initially developed in English and translated into Japanese, the researcher paid attention equally towards the qualitative data provided by the Japanese and Australian participants through all the design procedures.

The English items were translated into Japanese after the reviews (see details following).

5.4 Reviewing and Revising Items

The individual items were refined through repeated processes of reviews and translations, taking the following steps.

Step1. reviewing individual items in English;
Step2. revising individual items in English based on reviewers’ feedback;
Step3. translating the items into Japanese;
Step4. reviewing individual items in Japanese; and
Step5. revising individual items in Japanese based on reviewers’ feedback (after Oppenheim, 2001).
5.4.1 Reviewing and revising items in English

To improve reliability and validity of measurement, individual items in English were reviewed by multiple persons: Principal supervisor (female Australian), associate-supervisor (bilingual male Japanese), co-supervisor (female Australian), a PhD student (female Australian but outside the age range), and two Australian university students who had the same attributes as the target samples (one female and one male). First, the reviewers looked thoroughly at each item separately in terms of content and wording appropriateness. Based on their feedback, questions wording was modified and a draft of the questionnaire developed. The interim questionnaire was completed tentatively by the PhD and university students next. The students were asked to complete the questionnaire without any explanation about the purposes of the review but asked to tick words and sentences that they did not understand well. Following the students’ responses, several words and sentences were again modified. These processes were repeated until the researcher, the supervisor, and the co-supervisors were satisfied about face and content validity of the questions.

5.4.2 Translating items into Japanese

After the questions in English were revised, they were translated into Japanese, using a ‘bilingual judges technique’ as described in detail previously (see section 3.5.1c). During this translation, the bilingual judges including the researcher paid considerable attention to translation equivalence. Behling and Law (2000) argued that translation equivalence could not be achieved when translation lacks semantic equivalence across languages, conceptual equivalence across cultures, and normative equivalence across societies. For example, ‘tea’ generally means a light meal in the afternoon or early evening in British English; however, ‘Ocha’, which is tea in English literally translated into Japanese, usually means merely Green tea, Coffee, or English tea. Without conveying the same implications to different respondents who use different languages, semantic equivalence could not be kept. Therefore, in this case, ‘tea’ in British English should be translated into ‘Nomimono to Keishoku’ (beverage and light meal in English) for Japanese respondents, to keep semantic equivalence. Similarly, conceptual equivalence would be disturbed if the original question were literally translated into the target language without taking into account the fact that target and source cultures do not share the same concept of a question item. For example, Australians’ concepts of ‘good men’ would be different from
those of Japanese. Therefore, those words often need to be translated freely rather than literally to equate the concepts. In addition to these two equivalences, respondents’ normative tendencies are also important for translation equivalence. Some societies or generations prefer formal wordings to casual (Tabei, 2005).

5.4.3 Reviewing and revising items in Japanese

The Japanese version of an interim questionnaire was developed in the same style as the English version. The questionnaire in Japanese was reviewed by Japanese university students who had the same attributes as the target respondents and who commenced their undergraduate courses at a university in Western Australia (1 male and 1 female). Like the reviews by the Australian students, the Japanese students were asked to complete the questionnaires without any explanation about the research but asked to tick unclear words and sentences. After completing their questionnaires, they were asked to explain how they interpreted each question and some key words. The reviews revealed that some sentences and words were different to that of the Australians; hence, those words and sentences were reconsidered and modified so that the three types of equivalence were obtained.

5.5 Developing Survey Questionnaire

Through the previous processes, a survey questionnaire for pilot-testing was finalised (see appendix 5A and appendix 5B for details). Table 5.3 summarises the components, number of items, and measurement scales used in a pilot study of the questionnaire which generated 38 items from 14 questions. The questions, items, and scales were carefully displayed, taking into account readability and visibility. The questionnaire originally used multi colours; however, the reviews revealed that a black-and-white design would cause no serious problems. Therefore, the questionnaires were printed one-sided, in black-and-white on four A4 pages.
<table>
<thead>
<tr>
<th>Components</th>
<th>Sub-components</th>
<th>No of items and measurement scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness to accept government being involved in social marketing activities</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s educative social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s promotional social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s paternalistic social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Values related to the freedom of the individual</td>
<td>Individual freedom to do</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Individual freedom to not to do</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Individual freedom from being told what to do or not to do</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Individual freedom and effects on others</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Individual freedom and social harmony</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Individual freedom and social good</td>
<td>1 × 5-point Likert</td>
</tr>
<tr>
<td></td>
<td>Similar words to a word ‘individual freedom’</td>
<td>1 × 3 description</td>
</tr>
<tr>
<td></td>
<td>Opposite words to a word ‘individual’</td>
<td>1 × 3 description</td>
</tr>
<tr>
<td>Respondents’ traits</td>
<td>Age</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Birthplace</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Breeding place</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Parent(s)’ birthplace</td>
<td>1 × 3 multiple choice</td>
</tr>
<tr>
<td></td>
<td>General attitudes and behaviours towards government –sponsored social marketing activities</td>
<td>1 × 5 multiple choice</td>
</tr>
<tr>
<td></td>
<td>Conformable tendency</td>
<td>1 × nominal</td>
</tr>
<tr>
<td></td>
<td>Comparison between social harmony and individual freedom</td>
<td>1 × nominal</td>
</tr>
<tr>
<td><strong>TTL</strong></td>
<td><strong>38 items</strong></td>
<td></td>
</tr>
</tbody>
</table>
5.6 Pilot Survey

There are several purposes of a pilot study as suggested by van Teijlingen and Hundley (2001); the pilot survey in this study was administered utilising two of these: 1) to examine adequacy of research instrument, and 2) to form a hypothetical structural model for the forthcoming main survey. It attempted to achieve the two purposes through qualitative and quantitative approaches. When employing the qualitative approaches, the researcher:

- observed attitudes, expressions, and behaviours of the respondents as they completed the questionnaire;
- recorded the time taken to complete the questionnaire;
- gathered feedback from the respondents after they completed the questionnaire;
- examined questionnaires completed by respondents; and
- explored the definitions of individual freedom based on analysis of the descriptions given by the respondents.

However, because of scheduling constraints, the researcher could not be present to observe the students completing the pilot study questionnaires in Japan. Instead, a lecturer from a university in the western part of Honshu, Japan was present and conveyed required information to the researcher, including duration for completion, behavioural observations, and any verbal comments by students. Following the qualitative analyses, quantitative data collected through the pilot study of both cohorts were analysed further in several ways. The researcher:

- screened the scores from all items through descriptive analyses;
- analysed each item related to readiness and values through comparisons of mean scores by ethnicity and gender;
- tested the reliable equality of items related to the readiness through a comparison of reliability coefficients by ethnicity; and
- conducted exploratory factor analysis (EFA) on the scores from items related to readiness and values by ethnicity, using SPSS Statistics17.0. EFA was used to evaluate roughly whether the hypothesised structures for readiness and values
corresponded with the factor structures of the sample and whether the factor structures of Australian and Japanese samples were equivalent.

However, because of the small number of respondents (42 Australian and 36 Japanese respondents) with the limited time and resources accompanying a PhD project, the results of EFA were insufficient to ensure reliability of generalisation or replication of the observed factor structures (Reise, Waller, & Comrey, 2000). Therefore, the researcher avoided determining a conclusion about the structures, based on the EFA results, but used them as general directions to modify the questionnaire and to formulate a hypothetical, structural model for the main survey yet to be implemented.

In addition, in contrast to the main quantitative study (chapter 6), confirmatory factor analysis (CFA) using structural equation modelling (SEM), and multi-group mean and covariance structure (MG-MACS) analysis were not used for the pilot study because the numbers of respondents for the necessary statistics were insufficient.

5.6.1 Methods (Pilot study)

The pilot study was implemented at classes of a university in Western Australia (WA) and a university in the western area of Honshu, Japan, between April and May 2009. Pen-and-paper self-administered survey questionnaires were distributed by the researcher or lecturers at both universities. Respondents at the university in WA were asked to complete an English version of the questionnaire with a Japanese version being completed simultaneously at the university in Japan. After completing the questionnaire, all of the respondents were offered stationery as a reward.

Table 5.4 presents the responses from the pilot survey for analyses by ethnicity and gender. In total, 86 surveys were administered, 47 English and 39 Japanese versions with all being returned. While all of the respondents were included in the qualitative analyses of descriptions concerning individual freedom to maximise the amount of qualitative information, five English and three Japanese respondents who did not answer more than one question subjected to the quantitative analysis were excluded completely from the statistical analyses to maximise accuracy of the results. For the demographic characteristics of respondents, see appendix 5C.
### Table 5.4
Overview of Respondents (Pilot Study)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian</td>
<td>24/21</td>
<td>23/21</td>
<td>47/42</td>
</tr>
<tr>
<td>Japanese</td>
<td>20/20</td>
<td>19/16</td>
<td>39/36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44/41</strong></td>
<td><strong>42/37</strong></td>
<td><strong>86/78</strong></td>
</tr>
</tbody>
</table>

**Note.** Left/Right: Left is the number of respondents for qualitative analyses of descriptions concerning individual freedom and right is the number of respondents for quantitative analyses.

### 5.6.2 Qualitative results (Pilot study)

The following provide a summary of the qualitative results of the pilot study. The details of the results are reported in appendices 5D for observations and feedback and 5E for concepts of individual freedom.

- The questionnaire retained the content and item equivalence between English and Japanese versions in the pilot study;
- Both Australian and Japanese respondents expressed slight difficulties in choosing answers to items of Q.10 (see appendix 5A and 5C for actual questions of Q.10 in English and in Japanese respectively) because of abstract contexts of the questions;
- The Japanese version required reconsideration about a word ‘social campaigns’ and the style of wordings;
- The missing values for a variable had no particular patterns; and
- Australian and Japanese respondents had different concepts of a word ‘individual freedom’, while they showed similarities in opposite concepts of the word.

### 5.6.3 Quantitative results (Pilot study)

This section focuses on statistics given by reliability tests and exploratory factor analysis (EFA) performed on Australian and Japanese scores for 22 items of Q.10, which are
related to readiness to accept government’s involvement in social marketing activities, readiness to accept government’s educational, promotional, and paternalistic social marketing approaches, and values related to the freedom of the individual. All of the quantitative analyses were conducted by ethnicity from the beginning because it was considered that a place a respondent was raised (question 5 in appendix 5A) and a language a respondent speaks at home with his/her parent(s) (questions 6 in appendix 5A) were reliable to divide respondents into two groups of interest in this study: Australians and Japanese. Some may argue possible differences by gender within ethnicity. However, because of the small number of respondents in each group (e.g. 16 male Japanese respondents), the present pilot study focused on the comparison by ethnicity while the main study took into account the comparison by gender.

Table 5.5 provides descriptions of the 22 items. Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. That is, GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV, ED, PR, and PT have four items and VA has six items. Respondents were given 5-point Likert scales, where 1 = Disagree and 5 = Agree and asked to circle the number that reflected their degree of disagreement or agreement. VA2, VA3, VA4, and VA5 are reversed items so that their original scores were transformed as 1 to 5, 2 to 4, 3 to 3, 4 to 2, and 5 to 1, using a transform function of SPSS Statistics 17.0.

Other statistics of the 22 items, including descriptive statistics, results of normality tests, and results of non-parametric tests, are reported in appendix 5F. Statistical results of Australian and Japanese scores from the other seven items (Q.11, Q12, Q13, and Q14) are reported in appendix 5G with descriptions of each items.
Table 5.5
22 Observed Items (Pilot Study)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV1</td>
<td>The Government should spend taxpayers’ money to solve social issues.</td>
</tr>
<tr>
<td>GV2</td>
<td>The Government sponsors social campaigns for the public good.</td>
</tr>
<tr>
<td>GV3</td>
<td>Government-sponsored social campaigns have had some influence on my behaviours.</td>
</tr>
<tr>
<td>GV4</td>
<td>I care about social issues even if they are not related to me directly.</td>
</tr>
<tr>
<td>ED1</td>
<td>When I need information about a social issue, I would find out what the Government says about it first.</td>
</tr>
<tr>
<td>ED2</td>
<td>Information provided by the Government increases our awareness of social issues.</td>
</tr>
<tr>
<td>ED3</td>
<td>The Government has responsibility to educate us on socially desirable behaviours.</td>
</tr>
<tr>
<td>ED4</td>
<td>Information coming from a government department is likely to be true.</td>
</tr>
<tr>
<td>PR1</td>
<td>The Government needs to provide us with practical information about how to adopt socially desirable behaviours.</td>
</tr>
<tr>
<td>PR2</td>
<td>The Government can effectively encourage us to achieve socially desirable behaviours.</td>
</tr>
<tr>
<td>PR3</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us with some incentives.</td>
</tr>
<tr>
<td>PR4</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us with social infrastructure that facilitates those behaviours.</td>
</tr>
<tr>
<td>PT1</td>
<td>I can do the right thing, so other people must be able to do the right thing, too.</td>
</tr>
<tr>
<td>PT2</td>
<td>It’s OK for the Government to restrict individual choices in order to solve social issues.</td>
</tr>
<tr>
<td>PT3</td>
<td>To keep social order, the Government has to control people to some extent.</td>
</tr>
<tr>
<td>PT4</td>
<td>Government regulations are an effective way to achieve social order.</td>
</tr>
<tr>
<td>VA1</td>
<td>Individual freedom can be achieved but not at the expense of social harmony.</td>
</tr>
<tr>
<td>VA2</td>
<td>If I don’t want to do something, I shouldn’t have to do it.</td>
</tr>
<tr>
<td>VA3</td>
<td>No one can tell me what to do or what not to do.</td>
</tr>
<tr>
<td>VA4</td>
<td>If I want to do something, I should be able to do it.</td>
</tr>
<tr>
<td>VA5</td>
<td>I should be able to do something as long as I don’t cause anyone else any harm.</td>
</tr>
<tr>
<td>VA6</td>
<td>For the good of our communities, sometimes it is necessary to restrain a individual’s freedom.</td>
</tr>
</tbody>
</table>

NOTE. Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV has eight items, ED, PR, and PT have four items, and VA has six items each.

* reversed items

The following section presents a discussion of the implementation and results from the use of various analyses using the designated statistical tools.
5.6.3a Reliability of measurement scale for readiness

Reliabilities of Australian and Japanese measurement scales for readiness to accept government-sponsored social marketing activities were analysed and compared using Cronbach’s alpha coefficients. Australian and Japanese scores from 16 items namely GV1, GV2, GV3, GV4, ED1, ED2, ED3, ED4, PR1, PR2, PR3, PR4, PT1, PT2, PT3, and PR4 were used for the analysis (see table 5.5). The analysis used the statistical test \( \left[ \frac{(1-\alpha_1)}{(1-\alpha_2)} \right] \) (van de Vijver & Leung, 1997), in which \( \alpha_1 \) and \( \alpha_2 \) represent Cronbach’s alphas of Japanese and Australian scores respectively. This statistic was followed by an \( F \) distribution with \( (N_1-1) \) and \( (N_2-1) \) degrees of freedom, in which \( N_1 \) and \( N_2 \) represent the Japanese and Australian sample sizes respectively. These tests revealed:

- The test statistic was \( \left[ \frac{(1-0.685)}{(1-0.693)} \right] = 1.026 \). The computed statistic 1.026 was smaller than the critical \( F \) ratio \( (F (35, 41) = 1.708, \text{ at } p\text{-value} < 0.05) \). The computed statistic indicated that there may not be a significant difference between the two Cronbach’s alphas. In other words, both reliability coefficients (alphas) appeared to be equal. Therefore, the developed items relating to readiness appeared to have very similar reliability in both Australian and Japanese cultures.

5.6.3b EFA: Readiness to accept government-sponsored activities

Following the previous reliability tests, the scores of the 16 items were factor-analysed by ethnicity, using EFA. Factors were extracted by the principal axis factoring (PAF) method. Principal component analysis (PCA) has been a major extraction method for factor analysis. However, this study chose PAF because: (a) PCA is not a factor analysis but a components analysis utilised mainly for summarising data, and (b) the main focus of the analysis in this study was constructs of readiness but PCA does not take into account structures of latent factors (Costello & Osborne, 2005).

The numbers of factors were determined based on two criteria: initial eigenvalues (>1.0) and the scree test. Although the scree test alone appeared very useful, there has been room for debate about eigenvalue as Costello and Osborne (2005) pointed out. They averred that eigenvalue-based-criteria tended to hold too many factors; thus the researcher followed the suggestion by Field (2005) who stated that factors should not be chosen.
based on the scree test alone as eigenvalues larger than 1 give valuable information about alternative influences of a factor.

Following the extraction, the factors were rotated by VARIMAX method as the results obtained from orthogonal rotations are easier to interpret than those from oblique rotations (Costello & Osborne, 2005).

The VARIMAX-rotated principal axis factor analysis performed on scores from the 16 items yielded factor loadings as shown in table 5.6 (Australian solution) and table 5.7 (Japanese solution).

The results of the EFA suggested:

- Both observed Australian and Japanese factorial structures appeared to disagree with the four-hypothesised structures;
- Both EFAs of Australian and Japanese scores extracted six latent factors, constructs of each factor appeared inconsistent between ethnicities;
- Both EFAs of Australian and Japanese scores were derived from extracted factors of readiness to accept government’s educational, promotional, and paternalistic social marketing approaches;
- Items for GV appeared problematic in Australian scores (GV1 having low loadings towards all the factors with GV4 alone contributing to F5); and
- None of the factors appeared to represent readiness to accept government’s involvement in social marketing activities.
Table 5.6
VARIMAX-rotated Principal Axis Factoring Loadings of 16 Items (Pilot Study; Australian \(n=42\))

<table>
<thead>
<tr>
<th>Items</th>
<th>Factors</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>F4*</th>
<th>F5*</th>
<th>F6*</th>
<th>Com**</th>
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<tbody>
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<td>.58</td>
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<thead>
<tr>
<th></th>
<th>Eigenvalues</th>
<th>Contribution ratio (%)</th>
<th>Cumulative contribution (%)</th>
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<td>5.68</td>
<td>55.39</td>
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</tbody>
</table>

Note: * = Factor loading > .4 is in bold, * * = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix=.002
- KMO=.547
- Sig of Bartlett’s Test of sphericity =.000
- Measures of sampling adequacy value of each item > .50
Table 5.7
VARIMAX-rotated Principal Axis Factoring Loadings of 16 Items (Pilot Study; Japanese n = 36)

<table>
<thead>
<tr>
<th>Items</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>F4*</th>
<th>F5*</th>
<th>F6*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
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<td>-.15</td>
<td>.07</td>
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<td>-.11</td>
<td>.16</td>
<td>.05</td>
<td>-.08</td>
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<td>.29</td>
<td>.02</td>
<td>-.38</td>
<td>-.04</td>
<td>-.32</td>
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<td>.19</td>
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<td>.37</td>
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<td>.24</td>
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<td>.18</td>
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<td>.06</td>
<td>-.10</td>
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<tr>
<td>PT3</td>
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<td>.07</td>
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<td>.57</td>
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<td>.66</td>
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<td>.83</td>
<td>.81</td>
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Note. * = Factor loading > .4 is in bold, ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix =.002
- KMO=.517
- Sig of Bartlett’s Test of sphericity =.011
- Measures of sampling adequacy value of each item > .50

5.6.3c EFA: Values related to individual freedom

The scores from six items (VA1, VA2*, VA3*, VA4*, VA5*, and VA6) were factor-analysed by ethnicity similarly to the previous EFAs of the 16 items related to readiness to accept government-sponsored social marketing activities. The Australian scores from the six items were appropriate for EFA: KMO = 0.533; Bartlett’s test p = 0.000; and Determinant of Correlation Matrix = 0.285. However, the scores from Japanese respondents were not appropriate for EFA: KMO = 0.425; Bartlett’s test p = 0.0131; and the Measures of Sampling Adequacy (MSA) values of VA1, VA2*, VA3*, VA4*, VA5*, and VA6 were 0.596, 0.439, 0.262, 0.453, 0.341 and 0.321 respectively.
This suggested that the Japanese scores did not meet assumptions of the EFA; therefore, the VARIMAX-rotated principal axis factor analysis was used only for the Australian scores from the six items. The analysis yielded factor loadings as shown in table 5.8 (see table 5.5 for descriptions of each item).

The results of the EFA suggested:

- Observed Australian factorial structure and the Japanese data did not agree to the hypothesised single factor structure of the values.

Table 5.8
VARIMAX-rotated Principal Axis Factoring Loadings of 6 Items
(Pilot Study; Australian n=42)

<table>
<thead>
<tr>
<th>Items</th>
<th>F1**</th>
<th>F2**</th>
<th>F3**</th>
<th>Com***</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA4*</td>
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<td>.17</td>
</tr>
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<td>VA5*</td>
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<td>VA2*</td>
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<tr>
<td>VA3*</td>
<td>.19</td>
<td>.91</td>
<td>-.17</td>
<td>.68</td>
</tr>
<tr>
<td>VA6</td>
<td>.24</td>
<td>-.39</td>
<td>-.08</td>
<td>.52</td>
</tr>
<tr>
<td>VA1</td>
<td>.13</td>
<td>-.05</td>
<td>.86</td>
<td>.36</td>
</tr>
</tbody>
</table>

Eigenvalues
Contribution ratio (%)
Cumulative contribution (%)

Note: * = Reversed items, ** = Factor loading > .4 is in bold, *** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix=.285
- KMO=.533
- Sig of Bartlett’s Test of sphericity =.000
- Measures of sampling adequacy value of each item > .50
5.6.3d Interpretation of EFA results of pilot study

It was expected that the main survey with larger sample would obtain factorial structures with higher loadings than those in pilot study so that they should be more reliable. Therefore, as mentioned in section 5.6 in this chapter, the results of EFAs in the pilot study were used as guidance for the preliminary evaluation of research instrument adequacy, and on formulating a hypothetical structural model for the main study.

The results of the EFAs showed differences exist between Australian and Japanese solutions. This suggested that Australian and Japanese university students may have interpreted the questions given to the survey respondents differently. If so, content equivalence of the developed research instrument was not ensured. In order to confirm this, in-depth face analysis of items in English was again conducted. This was considered beneficial for reassurance as to whether the questions were interpreted similarly by the Australian and Japanese research cohorts. The in-depth interviews with students at a university in Western Australia were administered by the researcher’s supervisor because it was deemed advisable that interviews by the researcher, whose first language is not English, would interpret possible miscommunications between interviewer and interviewees; therefore, this involvement maximised the accuracy of the final analysis. The individual, in-depth face analyses revealed that the Australian respondents understood and interpreted as expected, and the Japanese respondents similarly. Therefore, it was unlikely that the questions gave different meanings to Australian and Japanese respondents but likely that the students actually responded differently to the same questions.

The solutions of EFAs in the pilot study did not perfectly agree with the expected structures of the concepts of interest. However, the extracted factors appeared to represent readiness to accept government’s educational, promotional, and paternalistic social marketing approaches, as well as values related to the freedom of the individual in both Australian and Japanese scores. The dilemma for the researcher was that no factors appeared to clearly represent readiness to accept government’s involvement in social marketing activities in either Australian or Japanese scores. In addition, items developed
to measure this readiness appeared problematic in the Australian EFA. These results seemed to suggest:

- Developed questions did not include a concept of readiness to accept government’s involvement in social marketing activities. Hence, additional questions should be developed; and
- Although readiness to accept government’s involvement in social marketing activities and readiness to accept government’s educational, promotional, and paternalistic social marketing approaches represented readiness to accept government-sponsored social marketing activities, readiness to accept government’s involvement in social marketing activities should be a different concept entirely.

Accordingly, the questionnaire was modified and a hypothetical structural model for the main study was formulated and is described subsequently.

5.7 Revising Survey Questionnaire

Based on the results of the qualitative and quantitative analyses, the following decisions were made to refine the questionnaire (refer to appendix 5H and 5I for the final English version and Japanese version of questionnaire respectively).

- No major wording change was made and no question was removed from the questionnaire;
- To minimise the degree of the context abstract, explanation about government-sponsored social marketing activities were added into the relevant instruction (see the instruction of Q10 in appendices 5H and 5I); however, the explanation was added as not to be too specific;
- To ensure familiarity of the Japanese respondents with the word ‘social campaigns’, the word was explained by sentences in Japanese, keeping meanings as they were in English;
- To fit the Japanese students’ preference, Japanese wordings were slightly changed into a more casual style;
• To minimise occurrence of missing values, the reminder was added to the last section of the questionnaire;

• To make the results of the main survey interpreted more comprehensively, nominal scales were changed into 5-point Likert-scales in several items (see Q11, Q12, and Q13 in appendices 5H and 5I);

• To solve the comparability of the values related to the individual freedom with different definitions between Australian and Japanese respondents, additional questions about importance of the values to the respondents were added with 5-point Likert scales (see last two items of Q13 in appendices 5H and 5I);

• To support interpreting the results of the scores related to the values, descriptive questions about similar and opposite concepts of individual freedom (see Q8 and Q9 in appendix 5H and 5I) were left as they were, although students had appeared to struggle with the questions at the both universities; and

• To avoid failing in measuring readiness to accept government being involved in social marketing activities, four more questions about the readiness were added into the questionnaire of both English and Japanese versions, based on literature on government’s communications and its roles in public health and safety (e.g Baker & Teret, 1981; Jones & Bayer, 2007; Perkins, 1981).

All of the changes on the Japanese version of questionnaire were scrutinised through the bilingual judges technique by two bilingual reviewers to keep equivalence of the questionnaire between English and Japanese versions. Table 5.9 shows the final construction of the questionnaire for the main survey.
<table>
<thead>
<tr>
<th>Components</th>
<th>Sub-components</th>
<th>No of items and measurement scale</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Structure A</td>
</tr>
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<td>Readiness to accept government being involved in social marketing activities</td>
<td>1 × 5-point Likert</td>
<td>8 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s educative social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s promotional social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Readiness to accept government’s paternalistic social marketing approach</td>
<td>1 × 5-point Likert</td>
<td>4 × 5-point Likert</td>
</tr>
<tr>
<td>Values related to the freedom of the individual</td>
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<td></td>
</tr>
<tr>
<td>Individual freedom to do</td>
<td>1 × 5-point Likert</td>
<td></td>
</tr>
<tr>
<td>Individual freedom to not do</td>
<td>1 × 5-point Likert</td>
<td></td>
</tr>
<tr>
<td>Individual freedom from being told what to do or not to do</td>
<td>1 × 5-point Likert</td>
<td></td>
</tr>
<tr>
<td>Individual freedom and effects on others</td>
<td>1 × 5-point Likert</td>
<td></td>
</tr>
<tr>
<td>Individual freedom and social harmony</td>
<td>1 × 5-point Likert</td>
<td></td>
</tr>
<tr>
<td>Individual freedom and social good</td>
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</tr>
<tr>
<td>Importance of individual freedom</td>
<td>2 × 5-point Likert</td>
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<td>Similar words to a word ‘individual freedom’</td>
<td>1 × 3 description</td>
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</tr>
<tr>
<td>Opposite words to a word ‘individual’</td>
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</tr>
<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1 × nominal</td>
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</tr>
<tr>
<td>Status</td>
<td>1 × nominal</td>
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<td>Language</td>
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</tr>
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<td>Parent(s)’ birthplace</td>
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</tr>
<tr>
<td>General attitudes and behaviours towards government –sponsored social marketing activities</td>
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<tr>
<td>Conformable tendency</td>
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<tr>
<td>Comparison between social harmony and individual freedom</td>
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<td><strong>48 items</strong></td>
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</tr>
</tbody>
</table>
5.8 Hypothetical Structural Model

The theory of strong relationships between values and attitudes/behaviours and findings from focus groups facilitated the formulation of the following hypothetical relationships:

- Values related to the freedom of the individual are related to readiness to accept government’s involvement in social marketing activities;
- Values related to the freedom of the individual are related to readiness to accept government’s educational social marketing approach;
- Values related to the freedom of the individual are related to readiness to accept government’s promotional social marketing approach;
- Values related to the freedom of the individual are related to readiness to accept government’s paternalistic social marketing approach; and
- If a person’s readiness to accept government’s educational, promotional and paternalistic social marketing approaches is congruent with government’s actual approach, he/she is likely to accept a message sent by government and take an action as recommended. However, on the contrary, if a person’s readiness to accept government’s educational, promotional and paternalistic social marketing approaches does not meet government’s actual approach, he/she is unlikely to accept a message sent by government and take action as recommended.

However, the theory and the findings did not provide enough information for specifying hypothesised relationships among values related to the freedom of the individual and key factors of readiness to accept government-sponsored social marketing activities although it was clear that values were a starting point. The pilot study provided this missing information. As discussed in section 5.6.3d in this chapter, readiness to accept government’s involvement in social marketing activities was likely to differ from readiness to accept government’s educational, promotional, and paternalistic social marketing approaches. However, these latter three concepts of readiness appeared to agree with a concept of readiness to accept a government’s social marketing approach in common. That is, readiness to accept the three approaches could be extant in the same group; however, readiness to accept government’s involvement could have a different
conclusion. In addition to this difference, considering order of occurrence, it appeared reasonable to accept that readiness to accept government’s involvement in social marketing activities would influence readiness to accept government’s social marketing approaches.

Considering the relationship between readiness to accept government’s involvement in social marketing activities and readiness to accept government’s three social marketing approaches with values influencing attitudes, the following model was hypothesised.

![Hypothesised structural model for main study](image)

**Figure 5.2** Hypothesised structural model for main study

In the model, the far left oval describes values related to the freedom of the individual (Values); the central oval represents readiness to accept government’s involvement in social marketing activities (Readiness of Involvement), and the three ovals to the right depict readiness to accept government’s educational, promotional, and paternalistic social marketing approaches from top (Education, Promotion, and Paternalism). It was hypothesised that Values influence Readiness of Involvement, and, in turn, Readiness of Involvement influence Education, Promotion, and Paternalism. That is, Values have direct influence on Readiness of Involvement and indirect influence on Education, Promotion, and Paternalism.
Testing of the hypothesised model is described in the following chapter.

5.9 Summary

This chapter presented details of: 1) questionnaire development procedures for the present study, 2) the pilot study, and 3) the rationale of the hypothetical relationships among values relating to the freedom of the individual, readiness to accept government’s involvement in social marketing activities, and readiness to accept government’s educational, promotional and paternalistic social marketing approaches with the hypothesised structural model to be tested in the forthcoming main study.
Chapter 6: SURVEY RESULTS

This chapter presents: 1) which study hypotheses were tested by the main questionnaire surveys; 2) how the surveys were conducted; 3) how the collected data was analysed; and 4) what results were obtained.

6.1 Research Hypotheses

The main focus of this study, on relationships between values related to the freedom of the individual and readiness to accept government-sponsored social marketing activities, is based on the theory that values influence attitudes and behaviours directly and indirectly (e.g. England et al., 1974; Homer & Kahle, 1988; Maio & Olson, 1998; Rokeach, 1973). Within this theoretical framework, concepts of individual freedom can be considered as values and concepts of readiness to accept government-sponsored social marketing activities can be regarded as attitudes. Hence, the theory assumes that values relating to the freedom of the individual influence level of readiness to accept government-sponsored social marketing activities and ultimately influence an individual’s determination to behave or not to behave as recommended in a social marketing context.

To the researcher’s knowledge, no study has investigated concepts of readiness of acceptance in a social marketing context. Accordingly, these concepts were explored through focus groups and pilot surveys implemented with Australian and Japanese university students aged between 18 and 23 years. The focus groups and the pilot surveys informed three overarching aspects: 1) readiness to accept government-sponsored social
marketing activities would have two underlying concepts: readiness to accept government’s involvement in social marketing activities, and readiness to accept government’s social marketing approaches, 2) readiness to accept government’s involvement in social marketing activities would precede readiness to accept government’s social marketing approaches, and 3) these government’s approaches would be educational, promotional and paternalistic. Based on this, the present study formulated five main hypotheses and five sub-hypotheses below.

**H_1:** University students’ perceptions of values connected with individual freedom are related to readiness to accept government’s involvement in social marketing activities.

- **H_{1a}:** Australian university students value individual freedom more than Japanese university students.
- **H_{1b}:** Japanese university students are higher in readiness level to accept government’s involvement in social marketing activities than Australian university students.

**H_2:** Readiness to accept government’s involvement in social marketing activities is related to readiness to accept government’s educational social marketing approach.

- **H_{2a}:** Japanese university students are higher in readiness level to accept government’s educational social marketing approach than Australian university students.

**H_3:** Readiness to accept government’s involvement in social marketing activities is related to readiness to accept government’s promotional social marketing approach.

- **H_{3a}:** Japanese university students are higher in readiness level to accept government’s promotional social marketing approach than Australian university students.

**H_4:** Readiness to accept government’s involvement in social marketing activities is related to readiness to accept government’s paternalistic social marketing approach.

- **H_{4a}:** Japanese university students are higher in readiness level to accept government’s paternalistic social marketing approach than Australian university students.
$H_3$: Compatibility between readiness of education, promotion, and paternalism and current approaches (section 2.6 of chapter 2) is related to attitudes and actions.

H1 (including H1a and H1b), H2 (including H2a), H3 (including H3a), and H4 (including H4a) were tested in a hypothesised structural model as depicted in figure 6.1.

![Figure 6.1 Hypothesised model](image)

H5 was not included in the structural model as both quantitative (i.e. scores from variables concerning self-reported general attitudes and behaviours) and qualitative information (i.e. the current social marketing activities by Australian and Japanese Governments discussed in section 2.6 of chapter 2) were necessary to test H5. Therefore, quantitative results related to self-reported general attitudes and behaviours are reported in section 6.7.1c of this chapter; however, H5 is investigated more fully in chapter 7 along with the qualitative information.

Each measurement models of the hypothesised model and the hypothesised model were examined, basically following steps of exploratory and confirmatory factor analyses for scale development and steps for structural equation modelling (SEM) recommended by Hair, Black, Babin, Anderson, & Tatham (2006).
6.2 Study Populations

Two groups, both being university students aged between 18 and 23 years from different cultures, Australian and Japanese were selected as study populations for the present study. The contexts of the group selections are detailed in chapter 4, section 4.2. Below, the demographics of the populations are described, based on the latest secondary data in Australia and Japan. Since the two countries’ fiscal year begins on the first days of July and the first days of January in Australia and Japan respectively, the collected data was relatively up-to-date but not concurrent.

According to ‘Students 2008 [full year]: Selected Higher Education Statistics’ (Department Education Employment and Workplace Relations, 2009), the total number of domestic undergraduate students in Australia was 567,466 in 2008 and of which 372,163 (65.58%) were between 18 and 23 years old. Although the 2008 data did not include country of birth and language spoken at home, the equivalent statistics in 2007 indicated that 75.5% and 81.2% of domestic higher education students in Australia were born in Australia and spoke English at home respectively. Based on these statistics, domestic undergraduate students who spoke English at home and were aged between 18 and 23 years in 2008 represented 1.41% of the Australian population (21,431,781 at the 30 June 2008) (Australian Bureau of Statistics, 2009).

According to ‘the 2009 Advance Report for Basic Survey of Schools’ (Ministry of Education Culture Sports Science and Technology, 2009), the total number of domestic undergraduate students in 2009 was 2,527,319 and of which 2,453,685 (97.09%) were Japanese citizens. The Japanese survey did not include statistics by age, country of birth, and language spoken at home. However, as 80% of the Japanese university students enter university by the age of 19 years old (Organisation for Economic Co-operation and Development, 2009), the age range between 18 and 23 years old was likely to occupy a high proportion of the total number of the Japanese undergraduate students. As the results of a migrant population census in 2006 (National Institute of Population and Social Security Research, 2008) indicated that more than 90% of the Japanese citizens were born and raised in Japan, most of them should speak Japanese at home because of the Japanese
linguistic customs. Based on these facts, the number of the Japanese undergraduate students who spoke Japanese at home and aged between 18 and 23 years was surmised to be 1,800,000 in 2009. This number occupied 1.41% of the Japanese population (127,530,000 at the 1 December 2009) (Ministry of Internal Affairs and Communications, 2009), as was the case in Australian in 2008.

The pictures of the populations were also examined from a viewpoint of generations. They have been called ‘Generation Y’ in Australia (McCrindle, 2002) and ‘The New Breed of People, Jr’ in Japan (Japan Consumer Marketing Research Institute, 2006). The details of these generations are discussed in chapter 2, section 2.5.2.

6.3 Sample Size and Sampling

In quantitative research, it is essential to sample individuals who properly represent a study population for extrapolating the results to the population (Creswell & Plano Clark, 2007). Applying this principle, the respondents of this study were required to be a representative sample of Australian and Japanese university students. Accordingly, the targeted respondents were determined, based on the following stratificational characteristics in this study, so that the respondents would have similar attributes (the rationale of the sample selection and the details of the background of the characteristic selections, including the determinants of the ethnicities, are explained in chapter 4, section 4.2).

- status: university students (preferably undergraduates);
- age: between 18 and 23 years;
- gender: female/male; and

The most reliable sampling method for generalising results to a population is simple random sampling (Scheaffer, Mendenhall, & Ott, 1996); however, the absence of a complete list of individual university students and limited resources including time and money did not allow random sampling for this study. Therefore, purposive sampling was used to select the targeted respondents. Purposive sampling has been criticised for being less objective and potentially biased (Black, 1999). However, considering the situational
constraints; no information about individual students, no list of the students, no resources to conduct a large-scale survey; and the purpose of this study – to compare Australian and Japanese university students– purposive sampling appeared the best option if respondents could be carefully selected. In order to satisfy this condition, respondents were selected through the following six stages:

1) determining sample size;
2) selecting universities;
3) selecting those aged between 18 and 23 years;
4) selecting university students;
5) selecting those who were raised in Australia as Australian respondents and those who were raised in Japan as Japanese respondents; and
6) selecting those who speak English at home as Australian respondents and those who speak Japanese at home as Japanese respondents.

Sample size was determined, based on the feasibility of the survey and the planned statistical analysis methods. The main survey was designed to test the collected quantitative data, using multi-group CFA (confirmatory factor analysis) and MG-MACS (Multi-Group Mean and Covariance Structure) that are applications of structural equation modeling (SEM) analysis; therefore, the sample size had to be satisfactory for constructing structural equation models. There is a wide range of suggested sizes from 150 (Anderson & Gerbing, 1988) to 5,000 (Hu, Bentler, & Kano, 1992). However, numerous studies agree that 100 to 150 respondents are the minimum for SEM (Ding, Velicer, & Harlow, 1995) and in fact, many researchers used from 250 to 500 respondents (Schumacker & Lomax, 1996). From these suggestions and the prospected situations of the data collection, the sample size of 200 from each population (400 respondents in total) was deemed appropriate for this study. A breakdown of the respondents was:

- 100 female respondents aged between 18 and 23 years, raised in Australia, and speaking English at home;
- 100 male respondents aged between 18 and 23 years, raised in Australia, and speaking English at home;
- 100 female respondents aged between 18 and 23 years, raised in Japan, and speaking Japanese at home; and
• 100 male respondents aged between 18 and 23 years, raised in Japan, and speaking Japanese at home.

Following the decision on the sample size, university selections were done before conducting the survey. First, one university in Western Australia was selected from the entire 38 public universities in Australia (Department Education Employment and Workplace Relations, 2009) and one university in the western part of Honshu from the entire 86 national universities in Japan (Ministry of Education Culture Sports Science and Technology, 2009), taking into account their accessibility and similarities in size, administrative forms and faculties. Although the Japanese university is a national university, it has been managed independently; therefore, the researcher judged that the two universities shared similar management formations. After selecting the universities, campuses where the survey was to be conducted were chosen. Considering equivalence of the student enrolments into the campuses, one campus in Joondalup, Western Australia, and one campus in Rokkodai, the western part of Honshu were selected. The student enrolments at the campuses in 2009 were about 9,500 in Joondalup (Edith Cowan University, 2009) and about 12,900 in Rokkodai (Kobe University, 2010).

Prospective respondents were selected by professional interviewers at lecture rooms and public areas in Joondalup and by lecturers at lecture rooms in Rokkodai. Prospective respondents who agreed to complete a questionnaire were further narrowed down to the targeted respondents through the first four questions of the questionnaire. These four questions corresponded to the stages 3, 4, 5, and 6 of the selections. The four questions were about age, status, country raised in, and language spoken at home, respectively and if the respondent lacked any of these attributes, he/she was asked to stop answering questions and excluded from the survey.

### 6.4 Instrument

The measurement instrument that was used for the main survey was a self-administered-pen-and-paper questionnaire (see appendix 5H and 5I for English version and Japanese version of questionnaire respectively). The questions were developed through several steps, based on the findings of focus groups and relevant
literature (the processes of focus groups and questionnaire development are detailed in chapter 4 and chapter 5). The questionnaire contained 39 main questions with 5-point-Likert scales, seven demographic questions with six yes/no nominal scales and one multiple-choice, and two descriptive questions (48 questions in total). The questionnaires were presented as double-sided books, fold printed, black-and-white, on four A4 pages. The English version of the questionnaire was distributed on the Joondalup campus and Japanese version on the Rokkodai campus. The average time to complete a questionnaire was between 15 and 20 minutes on both campuses.

6.5 Conducting the Questionnaire Survey

The survey was conducted on the Joondalup campus, Western Australia in September 2009, and on the Rokkodai campus, the western part of Honshu, Japan between October and November 2009. Professional interviewers from the Survey Research Centre distributed the English version of the questionnaire, and asked students to complete a questionnaire, by visiting lecture rooms, cafes, and other public areas in the Joondalup campus. Lectures at the university in the western part of Honshu, Japan distributed and asked students to complete the Japanese version of questionnaire at lecture rooms. To ensure anonymity, confidentiality of the survey was declared in the introductory description and any details of a respondent, including a name, address, or contact number were not recorded in a questionnaire. At the same time, an additional description was also given in the introduction to get respondents’ frank opinions so that trustworthiness of collected data could be boosted. After completion of the questionnaire, all of the respondents were offered a chance to win a prize (A$100 gift voucher for an Australian student and JPY1,000 for a Japanese student) if they entered the draw. To fulfil anonymity and confidentiality, another sheet of a prize entry form was distributed and the completed forms were shredded and discarded immediately after the draw.

In order to minimise effects of situational factors and maximise equivalence of the data, the survey was conducted under as similar conditions as possible at both universities; it was limited to daytime on weekdays during a semester, avoiding major exam weeks. The interviewers and the lecturers conveyed additional information to the researcher, including behavioural observations and any verbal comments by students. No comments
that could menace procedural equivalence were reported. From these observations, it appeared reasonable to conclude that the selected populations had equal representativeness of the two societies.

### 6.6 Data Analysis

For data analysis, qualitative and quantitative analysis methods were used for the words and sentences provided by the respondents for two descriptive questions and statistical analysis methods for the responses to the other 46 questions.

All of the analyses in the main survey were performed on Australian and Japanese scores separately for two reasons. First, the interest of the present study was in similarities and differences between Australian and Japanese university students. Thus, it was assumed that comparisons between the students would be more appropriate than exploration of the students all together. In fact, numerous studies in cultural comparison (e.g. Callow & Schiffman, 2004; Kiran, Rao, & Anusorn, 2002; Soutar et al., 1999) treated their data separately, based on cultural groups.

Second, the criteria for determining ethnicity in the present study appeared valid; that is, it was reasonably assumed that the Australian and Japanese university student participants represented Australian and Japanese cultures respectively (see section 4.2 of chapter 4 for details of the rationale for the criteria).

#### 6.6.1 Analyses of descriptions

Descriptions of similar and opposite concepts of individual freedom, provided by the respondents, were analysed through parallel procedures with those of the pilot study (see section 6.7.1f). Firstly, the collected words and sentences in English from the Australian respondents were coded and categorised into groups by the researcher and an English-Japanese Professor, according to similarities in meanings of given words and sentences. Secondly, these categories were further grouped into upper-level categories in
their similarities and these processes were repeated until the two analysts reached agreements. Thirdly, the same procedures were applied to the Japanese words and sentences from the Japanese respondents, except for that the Japanese words and sentences were coded and categorised in Japanese in order to maintain their original meanings. After finalising the categories, the Japanese codes of the categories were translated into English, taking into account the codes for the Australian descriptions. Lastly, frequencies of the categorised words and sentences were counted and compared between the Australian and the Japanese respondents. Through these processes, the NVivo8 software for qualitative data analysis was used to improve the accuracy of data sorting and to facilitate analysis as it was considered useful for storing, coding, comparing, and linking the data. Although there were several qualitative data analysis programs, NVivo 8 was reviewed as the most useful as it excels in simultaneous multilingual data analyses (QSR International, 2010).

6.6.2 Statistical Analyses

Data examination

Before commencing comparative statistical analyses, the scores from the 46 questions were examined to ensure accuracy of the data-inputs and to understand the characteristics of the data. First, the scores were screened; second, they were described statistically, including measures of central tendency, dispersion and distribution, and normality tests, non-parametric tests, or crosstabs.

Missing data

Missing data was treated in two different ways, according to the question’s features. One was the complete case approach which excludes cases from analysis when they have more than one missing values for particular variables. In the main survey, this approach was applied to the missing value for the nine questions where the actual responses were indispensable: Q11 (four direct questions about the respondent’s readiness levels to accept government’s educational, promotional, and paternalistic approaches and its involvement in social marketing activities), Q12 (five questions about respondent’s general attitudes and behaviours towards government-sponsored social marketing activities), and Q13 (four questions about the respondent’s personal traits). Another approach was the imputation method that replaces the missing data with values. Although
the imputed data may involve biases (Hair et al., 2006), the method allows a researcher to avoid a reduction in sample size. Therefore, the imputation method was applied to all of the missing values for a variable related to readiness and to values (26 variables in Q10). The number of missing values for the 26 variables of Q10 was 43 (0.3% of the 12,558 expected total responses). As there were no specific non-random patterns with the missing data (see table 6.1), the mean substitution imputation technique was appropriate (Schumacker & Lomax, 1996). Therefore, the missing values of the 26 variables were replaced by the mean calculated from other valid values of each variable.

Table 6.1
Frequencies of Missing Responses

<table>
<thead>
<tr>
<th>Items</th>
<th>Australians</th>
<th></th>
<th>Japanese</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td></td>
</tr>
<tr>
<td>Q10_1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Q10_2</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q10_3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Q10_5</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q10_6</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Q10_7</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q10_9</td>
<td>2</td>
<td></td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Q10_10</td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Q10_13</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Q10_14</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q10_15</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q10_16</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q10_17</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q10_18</td>
<td>2</td>
<td></td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Q10_19</td>
<td>1</td>
<td>2</td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Q10_20</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q10_21</td>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Q10_22</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Q10_23</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q10_25</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>13</td>
<td>5</td>
<td>12</td>
<td>43</td>
</tr>
</tbody>
</table>

Main analyses

Main analyses were conducted, using scores from 26 items of Q10, in order to test the hypotheses. Considering the requirements for testing the hypotheses, five statistical methods were chosen for this study; 1) EFA (exploratory factor analysis), 2) CFA (confirmatory factor analysis), 3) MG-CFA (Multi-group confirmatory factor analysis), 4) Structural model tests, and 5) MG-MACS (Multi-Group Mean and Covariance Structure) model analysis.
In this study, EFA was the starting point for operationalising the concepts of interest, prior to CFA. Therefore, the purposes of EFA were to:

- clarify measurement models of readiness to accept the government’s social marketing approaches, readiness to accept government involvement in social marketing activities, and values related to the freedom of the individual;
- assess dimensionality of the measurement models; and
- carry out preliminary examination of constructional equivalences of the measurement models between Australian and Japanese respondents.

Following the EFA, CFA was performed to test measurement capabilities of the identified measurement models for the latent concepts, using scores from Australian and Japanese respondents separately. MG-CFA was chosen for assessing how similar the Australian and Japanese scores were in each measurement model. This similarity is called cross-validation (Hair et al., 2006) and evidence of the cross-validation between different groups is essential for their comparability. Without the evidence, it can never be ensured that the measurement model measures the same concept across the different groups. After using CFA and MG-CFA with the measurement models, the present study tested the hypothesised structural model, integrated the measurement models and tested the following hypothesised relationships:

1) a relationship between values related to individual freedom and readiness to accept government’s involvement in social marketing activities; and
2) a relationship between readiness to accept government’s involvement in social marketing activities and readiness to accept government’s social marketing approaches

As the final step of the main analyses, MG-MACS model analysis was chosen to test equivalence of the structural models between Australian and Japanese scores and to compare the means of latent variables in the models for Australian and Japanese scores.

CFA, MG-CFA, Structural model test, and MG-MACS model analysis are applications of SEM (structural equation modeling) that is a statistical methodology combining path models and confirmatory factor models into the same model (Schumacker & Lomax,
Rationale behind these selections of methods is discussed in more detail in section 5.2.2 of chapter 5.

The SEM procedures were described above based on the idea of a “two-step approach” (Anderson & Gerbing, 1988) in which the measurement and structural sub-models are estimated separately. Compared with a one-step approach in which the measurement and structural sub-models are estimated together, the two-step approach has advantages in that separate assessments of measurement models provide benchmarks, against which the structural model can be accepted, and provide more meaningful information about how to interpret the constructs tested (Anderson & Gerbing, 1988).

Data management, data examination, and EFA were performed, using SPSS Statistics 17.0. This statistical analysis software was chosen partly because the researcher had access to the program and partly because the program has been used in many universities (Field, 2005). SEM analyses were performed, using AMOS (Analysis of MOment Structures) Graphics 17.0. Although there were other computer software, including EQS and LISREL, AMOS appeared the most user-friendly program as it enabled a user to easily draw the model as it was capable of translating the drawing to appropriate calculation programs (Blunch, 2008). However, no matter which software the researcher used, she paid as much attention as possible to ensure accuracy of the analyses by double-checking data inputs, data selections and command selections for the analyses, and asking her supervisors to confirm them.

In all analyses of this study, the criterion of a p-value less than 0.05 (or a 95% confidence interval level) was used for statistical significances.

6.7 Results

Results are reported separately below, according to the purpose of the analysis. First, results related to the respondents, including their characteristics and concepts of the individual freedom, are reported by ethnicity and by gender within each ethnicity in order
to grasp who the respondents are. Second, results of main analyses, which tested the study’s hypotheses, are reported.

Through all the analyses, to test if scores from each variable were normally distributed; the Kolmogorov-Smirnov (K-S) was used. The K-S tests showed that all of the scores were not normally distributed. Hence, the non-parametric Mann-Whitney test was chosen to determine whether the scores of each variable were different between the ethnicities and between genders within each ethnicity.

For Q11, Q12, and Q13, relative frequency distributions of each point of the 5-point Likert scale are also reported by ethnicity, by gender within ethnicity. The percentages were calculated by dividing a count in each point of the 5-point Likert scale by the total respondent number of each group.

These results are reported in each relevant section.

### 6.7.1 Exploration of respondents

#### 6.7.1a Demographic characteristics of respondents

Survey respondents included a purposive sample of 236 Australian and 264 Japanese university students aged between 18 and 23 years (500 respondents in total) at two universities in Western Australia (WA) and the western part of Honshu, Japan. Within them, five Australian and 12 Japanese responses were excluded from the statistical analyses as they had more than one missing value for variables of Q11, Q12, or Q13 (see section 6.6.2 of this chapter for details of treatment of missing values). Accordingly, 231 Australian and 252 Japanese respondents (483 respondents in total) were included in the analyses. However, no matter whether they were included in the statistical analyses or not, all of the provided words and sentences for Q8 and Q9 (similar and opposite concepts of individual freedom) were included for the descriptive analyses. The present study took this approach because the words and sentences provided qualitative information that was considered to be both variable and valid for the descriptive analyses.
Table 6.2 shows demographic characteristics of the 483 respondents for the statistical analyses with the actual number and percentages of relevant respondents. Details of the number of respondents who were subject to the qualitative analyses are presented later in section 6.7.1f of this chapter.

Table 6.2

Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Ethnicity</th>
<th>Total No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australian No. (%)</td>
<td>Japanese No. (%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>127 (55.0)</td>
<td>76 (30.2)</td>
</tr>
<tr>
<td>Male</td>
<td>104 (45.0)</td>
<td>176 (69.8)</td>
</tr>
<tr>
<td>Birthplace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia/Japan</td>
<td>186 (80.5)</td>
<td>251 (99.6)</td>
</tr>
<tr>
<td>Others</td>
<td>45 (19.5)</td>
<td>1 (0.4)</td>
</tr>
<tr>
<td>Parents’ birthplace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both Australia/Japan</td>
<td>92 (39.8)</td>
<td>250 (99.2)</td>
</tr>
<tr>
<td>One Australia/Japan</td>
<td>57 (24.7)</td>
<td>1 (0.4)</td>
</tr>
<tr>
<td>Neither Australia/Japan</td>
<td>82 (35.5)</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>1 (0.4)</td>
<td></td>
</tr>
</tbody>
</table>

Although the number of female and male Australian, and male Japanese respondents exceeded the targeted sample size (100 each), female Japanese respondents could not achieve the size (76 actual respondents). Additional efforts were made to recruit more female Japanese responses by extending the survey period; however, in order to maintain the procedural equivalence of the survey between WA and the western part of Honshu, the data collection in Japan was terminated two months from commencement. It is conceivable that this happened because fewer female Japanese students attended the lectures where the main survey was conducted. In fact, the ratio of females to males enrolled at the university in Japan was 1:3 (Kobe University, 2010), while it was 1.5:1 in WA (Edith Cowan University, 2009).
To test the sufficiency of a sample of 76; the female Japanese scores from 26 variables of Q10 were compared with those of the male Japanese scores, using the Kolmogorov-Smirnov (K-S) test. The test found that there was no significant difference between the scores from 176 male Japanese respondents and 76 female Japanese respondents (details are shown in the section 6.7.2a along with the equivalent test for the Australian scores). This confirmed that female and male Japanese respondents could be combined, which suggested that the number of female Japanese respondents were acceptable for testing the study hypotheses. As a result, the proportions of females and males in respondents at the two universities were 1.2:1 in WA, and 1:2.3 in Rokkodai.

With respect to birthplace, 80.5% of the Australian respondents were born in Australia and 99.6% of the Japanese respondents were born in Japan. 39.8% of the Australian respondents had parents who were both born in Australia, followed by 35.5% with neither parents born in Australia, and 24.7% with one parent born in Australia. In contrast, 99.2% of the Japanese respondents had parents who both were born in Japan; only one respondent (0.4%) had a parent who was not born in Japan, and one respondent (0.4%) did not provide his/her parents’ birthplace information.

6.7.1b Q11: Readiness to accept government’s social marketing activities

Four questions within Q11 (see table 6.3 for descriptions of Q11-1, Q11-2, Q11-3, and Q11-4) were designed to measure respondents’ readiness levels via a single variable for each of the following, for accepting government involvement in social marketing activities, and the government’s educational, promotional, and paternalistic social marketing approaches. The respondents were given 5-point Likert scales, where 1 = Reject and 5 = Accept, and asked to circle the number that reflected their degree of acceptance or rejection.
Table 6.3
4 Observed Items for Q11

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11-1</td>
<td>The Government should provide information about social issues, leaving us to make our own informed choice.</td>
</tr>
<tr>
<td>Q11-2</td>
<td>The Government should provide information, products, and services to influence us directly to adopt socially desirable behaviours.</td>
</tr>
<tr>
<td>Q11-3</td>
<td>The Government should pass regulations and laws that control our behaviours through punishments like fines and imprisonment.</td>
</tr>
<tr>
<td>Q11-4</td>
<td>The Government should get involved in activities such as social campaigns to influence our behaviour.</td>
</tr>
</tbody>
</table>

Scores of means (M), standard deviations (SD) from the four items are reported in table 6.4 by ethnicities and genders within each ethnicity.

Table 6.4
Descriptive Statistics (Mean and Standard Deviation) of Scores of Q11

<table>
<thead>
<tr>
<th>Ethnicities</th>
<th>Australians</th>
<th>Japanese</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=231</td>
<td>n=252</td>
<td>n=127</td>
<td>n=104</td>
<td>n=76</td>
<td>n=176</td>
</tr>
<tr>
<td>Items</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Q11-1</td>
<td>3.93</td>
<td>0.867</td>
<td>3.54</td>
<td>1.030</td>
<td>3.90</td>
<td>0.775</td>
</tr>
<tr>
<td>Q11-2</td>
<td>3.57</td>
<td>0.841</td>
<td>3.80</td>
<td>0.929</td>
<td>3.69</td>
<td>0.731</td>
</tr>
<tr>
<td>Q11-3</td>
<td>3.38</td>
<td>1.104</td>
<td>3.70</td>
<td>1.092</td>
<td>3.44</td>
<td>1.066</td>
</tr>
<tr>
<td>Q11-4</td>
<td>3.56</td>
<td>0.921</td>
<td>3.71</td>
<td>0.940</td>
<td>3.64</td>
<td>0.833</td>
</tr>
</tbody>
</table>

The results of the Kolmogorov-Smirnov (K-S) test showed that the four items (Q11-1, Q11-2, Q11-3, and Q11-4) were not normally distributed (p-values: 0.000, 0.000, 0.000, 0.000, and 0.000 respectively).

The non-parametric Mann-Whitney test (p = one-tailed significance) revealed that:

- Australian scores were significantly higher for readiness level in Q11-1 ($U=523014.00$, $p=0.000$) than Japanese scores (see table 6.4);
- Japanese scores were significantly higher for readiness levels in Q11-2 ($U=24765.50$, $p=0.0002$), Q11-3 ($U=24010.00$, $p=0.001$), and Q11-4 ($U=26510.50$, $p=0.037$) than Australian scores (see table 6.4);
Female Australian scores did not differ significantly for readiness levels in Q11-1 ($U=6030.50$, $p=0.113$), Q11-3 ($U=6206.00$, $p=0.207$), and Q11-4 ($U=6090.50$, $p=0.140$) from male Australian scores (see table 6.4);

Female Australian scores were significantly higher for readiness level in Q11-2 ($U=5648.50$, $p=0.021$) than male Australian scores (see table 6.4);

Female Japanese scores did not differ significantly for readiness levels in Q11-1 ($U=6408.00$, $p=0.291$) and Q11-2 ($U=5917.50$, $p=0.062$) from male Japanese scores (see table 6.4);

Male Japanese scores were significantly higher for readiness level in Q11-3 ($U=5612.50$, $p=0.017$) than female Japanese scores (see table 6.4); and

Female Japanese scores were significantly higher for readiness level in Q11-4 ($U=5302.50$, $p=0.003$) than male Japanese scores (see table 6.4).

Tables 6.5a, 6.5b, and 6.5c report relative frequency distributions of each point of the 5-point Likert scale for Q11-1, Q11-2, Q11-3, and Q11-4 by ethnicity, by gender within Australians, and by gender within Japanese respectively. The percentages were calculated by dividing a count in each point of the 5-point Likert scale by the total respondent number of each group.
Table 6.5
Readiness Levels to Accept Government-sponsored Social Marketing Activities: Direct Questions (% of counts of each point of 5-point Likert Scale)

a. By ethnicity

| Items | Australians n=231 | | | | | Japanese n=252 | | | | |
|-------|------------------|---|---|---|---|---|---|---|---|---|---|---|
|       | 1    | 2    | 3    | 4    | 5    |       | 1    | 2    | 3    | 4    | 5    |       |
| Q11-1 | 0.4  | 5.6  | 21.6 | 45.0 | 27.3 |       | 4.0  | 10.3 | 31.3 | 36.1 | 18.3 |       |
| Q11-2 | 1.7  | 7.8  | 32.5 | 48.1 | 10.0 |       | 2.0  | 5.6  | 26.6 | 42.5 | 23.4 |       |
| Q11-3 | 5.6  | 14.3 | 34.2 | 28.1 | 17.7 |       | 5.2  | 8.3  | 23.0 | 38.5 | 25.0 |       |
| Q11-4 | 2.6  | 8.2  | 33.8 | 41.6 | 13.9 |       | 2.0  | 6.7  | 30.6 | 39.7 | 21.0 |       |

b. By gender within Australians

| Items | Female Australians n=127 | | | | | Male Australians n=104 | | | | |
|-------|--------------------------|---|---|---|---|--------------------------|---|---|---|---|---|
|       | 1    | 2    | 3    | 4    | 5    |       | 1    | 2    | 3    | 4    | 5    |       |
| Q11-1 | 0.0  | 3.1  | 26.0 | 48.8 | 22.0 |       | 1.0  | 8.7  | 16.3 | 40.4 | 33.7 |       |
| Q11-2 | 0.8  | 3.1  | 33.1 | 52.8 | 10.2 |       | 2.9  | 13.5 | 31.7 | 42.3 | 9.6  |       |
| Q11-3 | 3.9  | 14.2 | 33.9 | 29.9 | 18.1 |       | 7.7  | 14.4 | 34.6 | 26.0 | 17.3 |       |
| Q11-4 | 0.8  | 6.3  | 35.4 | 43.3 | 14.2 |       | 4.8  | 10.6 | 31.7 | 39.4 | 13.5 |       |

c. By gender within Japanese

<table>
<thead>
<tr>
<th>Items</th>
<th>Female Japanese n=76</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Male Japanese n=176</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Q11-1</td>
<td>1.3</td>
<td>13.2</td>
<td>32.9</td>
<td>38.2</td>
<td>14.5</td>
<td></td>
<td>5.1</td>
<td>9.1</td>
<td>30.7</td>
<td>35.2</td>
</tr>
<tr>
<td>Q11-2</td>
<td>1.3</td>
<td>3.9</td>
<td>22.4</td>
<td>44.7</td>
<td>27.6</td>
<td></td>
<td>2.3</td>
<td>6.3</td>
<td>28.4</td>
<td>41.5</td>
</tr>
<tr>
<td>Q11-3</td>
<td>7.9</td>
<td>10.5</td>
<td>22.4</td>
<td>44.7</td>
<td>14.5</td>
<td></td>
<td>5.2</td>
<td>8.3</td>
<td>23.0</td>
<td>38.5</td>
</tr>
<tr>
<td>Q11-4</td>
<td>0.0</td>
<td>6.6</td>
<td>15.8</td>
<td>53.9</td>
<td>23.7</td>
<td></td>
<td>2.8</td>
<td>6.8</td>
<td>36.9</td>
<td>33.5</td>
</tr>
</tbody>
</table>

As can be seen from the tables:

- There was no evidence of bimodal patterns within a gender or ethnicity;
- For Q11-1, the mode was ‘4’ (45.0% of the Australian respondents, 36.1% of the Japanese respondents, 48.8% of the female Australian respondents, 40.0% of the male Australian respondents, 38.2% of the female Japanese respondents, and 35.2% of the male Japanese respondents);
• For Q11-2, the mode was ‘4’ (48.1% of the Australian respondents, 36.1% of the Japanese respondents, 52.8% of the female Australians respondents, 42.3% of the male Australian respondents, 44.7% of the female Japanese respondents, and 35.2% of the male Japanese respondents);

• For Q11-3, the mode was ‘3’ in Australian respondents (34.2%), female Australian respondents (33.1%), and male Australians respondents (34.6%); however, the mode was ‘4’ in Japanese respondents (38.5%), female Japanese respondents (44.7%), and male Japanese respondents (38.5%); and

• For Q11-4, the mode was ‘4’ in Australian respondents (41.6%), Japanese respondents (39.7%), female Australian respondents (43.3%), male Australian respondents (39.4), and female Japanese respondents (53.9%). However, the mode was ‘3’ in male Japanese respondents (36.9%).

6.7.1c Q12: Self-reported General attitudes and behaviours

Five questions within Q12 were designed to measure respondents’ general response towards government-sponsored social marketing activities. The respondents were given five descriptive combinations of the attitudes and behaviours (see table 6.6 for the descriptions) and asked to circle the number that reflected their degree of agreement or disagreement from 5-point Likert scales, where 1 = Disagree and 5 = Agree.

Table 6.6
5 Observed Items for Q12

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12-1</td>
<td>I have a complete disregard for the Government’s social campaigns.</td>
</tr>
<tr>
<td>Q12-2</td>
<td>Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours OR influence me to take any action.</td>
</tr>
<tr>
<td>Q12-3</td>
<td>Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours BUT I generally DO take some actions.</td>
</tr>
<tr>
<td>Q12-4</td>
<td>Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours BUT I generally DO NOT take any action.</td>
</tr>
<tr>
<td>Q12-5</td>
<td>Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours, AND I generally DO take some actions when appropriate.</td>
</tr>
</tbody>
</table>

Scores of means (M) and standard deviations (SD) from the five items are reported in table 6.7 by ethnicity and by gender within each ethnicity.
Table 6.7
Descriptive Statistics (Mean and Standard Deviation) of Scores of Q12

<table>
<thead>
<tr>
<th>Items</th>
<th>Ethnicities</th>
<th>Australians</th>
<th>Japanese</th>
<th>Australians</th>
<th>Japanese</th>
<th>Africans</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n=231</td>
<td>n=252</td>
<td></td>
<td></td>
<td>n=127</td>
<td>n=104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
</tr>
<tr>
<td>Q12-1</td>
<td></td>
<td>2.35 0.821</td>
<td>2.52 1.099</td>
<td>2.18 0.858</td>
<td>2.57 0.953</td>
<td>2.46 1.064</td>
<td>2.55 1.115</td>
</tr>
<tr>
<td>Q12-2</td>
<td></td>
<td>2.82 1.047</td>
<td>2.71 1.151</td>
<td>2.62 0.991</td>
<td>3.06 1.069</td>
<td>2.62 1.058</td>
<td>2.77 1.189</td>
</tr>
<tr>
<td>Q12-3</td>
<td></td>
<td>3.00 0.882</td>
<td>2.77 0.960</td>
<td>2.94 0.911</td>
<td>3.08 0.844</td>
<td>2.67 0.999</td>
<td>2.81 0.942</td>
</tr>
<tr>
<td>Q12-4</td>
<td></td>
<td>2.75 1.016</td>
<td>3.10 1.036</td>
<td>2.72 1.021</td>
<td>2.78 1.014</td>
<td>3.11 0.946</td>
<td>3.10 1.075</td>
</tr>
<tr>
<td>Q12-5</td>
<td></td>
<td>3.24 0.975</td>
<td>2.74 1.002</td>
<td>3.38 0.959</td>
<td>3.08 0.972</td>
<td>2.80 0.938</td>
<td>2.72 1.030</td>
</tr>
</tbody>
</table>

The results of the K-S test showed that the five items (Q12-1, Q12-2, Q12-3, Q12-4, and Q12-5) were not normally distributed (p-values: 0.000, 0.000, 0.000, 0.000, and 0.000 respectively).

The non-parametric Mann-Whitney test (p = two-tailed significance) revealed that:

- Australian scores did not differ significantly for agreement levels in Q12-1 ($U=27477.00, p=0.266$) and Q12-2 ($U=27141.00, p=0.178$) from Japanese scores (see table 6.7);
- Australian scores were significantly higher for agreement levels in Q12-3 ($U=25284.50, p=0.008$) and Q12-5($U=21187.50, p=0.000$) than Japanese scores (see table 6.7);
- Japanese scores were significantly higher for agreement level in Q12-4 ($U=23433.00, p=0.000$) than Australian scores (see table 6.7);
- Female Australian scores did not differ significantly for agreement levels in Q12-3 ($U=6117.00, p=0.305$) and Q12-4 ($U=6399.50, p=0.672$) from male Australian scores (see table 6.7);
- Female Australian scores were significantly higher for agreement level in Q12-5 ($U=5470.00, p=0.019$) than male Australian scores (see table 6.7);
- Male Australian scores were significantly higher for agreement levels in Q12-1 ($U=5126.60, p=0.002$) and Q12-2 ($U=5121.00, p=0.002$) than female Australian scores (see table 6.7); and
Female Japanese scores did not seem to differ in agreement levels of Q12-1 ($U=6397.50$, $p=0.567$), Q12-2 ($U=6151.00$, $p=0.293$), Q12-3 ($U=6162.50$, $p=0.292$), Q12-4 ($U=6585.50$, $p=0.840$) and Q12-5 ($U=6337.50$, $p=0.488$) from male Japanese scores (see details in table 6.7).

Tables 6.8a, 6.8b, and 6.8c report relative frequency distributions of each point of the 5-point Likert scale for Q12-1, Q12-2, Q12-3, Q12-4, and Q12-5 by ethnicity, by gender within Australians, and by gender within Japanese respectively.

As can be seen from the tables:

- There was no evidence of bimodal patterns within a gender or ethnicity;
- For Q12-1, the mode was ‘2’ in Australian respondents (35.9%), Japanese respondents (40.5%), female Australian respondents (40.2%), female Japanese respondents (46.1%), and male Japanese respondents (17.0%). However, the mode was ‘3’ in male Australian respondents (40.4%);
- For Q12-2, the mode was ‘2’ in Japanese respondents (36.9%), male Australian respondents (28.8%), and female Japanese respondents (51.3%). However, the mode was ‘2’ and ‘3’ in Australian respondents (31.6%) and male Japanese respondents (30.7%), and ‘3’ in female Australian respondents (35.4%);
- For Q12-3, the mode was ‘3’ through all the groups (44.6% of Australians, 46.8% of Japanese, 45.7% of female Australians, 43.3% of male Australians, 42.1% of female Japanese, and 48.9% of male Japanese);
- For Q12-4, the mode was ‘3’ through all the groups (39.0% of Australians, 40.9% of Japanese, 38.6% of female Australians, 39.4% of male Australians, 42.1% of female Japanese, and 40.3% of male Japanese); and
- Q12-5, the mode was ‘3’ in Japanese respondents (40.9%), male Australians (34.6%), female Japanese (40.8%), and male Japanese (40.9%). However, the mode was ‘4’ in Australian respondents (34.6%) and female Australians (38.6%).
Table 6.8
General Attitudes and Behaviours towards Government-sponsored Social Marketing Activities (% of counts of each point of 5-point Likert Scale)

a. By ethnicity

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12-1</td>
<td>19.5</td>
<td>35.9</td>
<td>35.1</td>
<td>8.7</td>
<td>0.9</td>
<td>16.7</td>
<td>40.5</td>
<td>22.2</td>
<td>15.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Q12-2</td>
<td>9.5</td>
<td>31.6</td>
<td>31.6</td>
<td>22.1</td>
<td>5.2</td>
<td>12.3</td>
<td>36.9</td>
<td>27.0</td>
<td>13.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Q12-3</td>
<td>4.3</td>
<td>22.5</td>
<td>44.6</td>
<td>25.5</td>
<td>3.0</td>
<td>11.9</td>
<td>21.8</td>
<td>46.8</td>
<td>16.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Q12-4</td>
<td>11.3</td>
<td>28.6</td>
<td>39.0</td>
<td>16.5</td>
<td>4.8</td>
<td>7.5</td>
<td>17.5</td>
<td>40.9</td>
<td>25.4</td>
<td>8.7</td>
</tr>
<tr>
<td>Q12-5</td>
<td>3.0</td>
<td>20.8</td>
<td>33.3</td>
<td>34.6</td>
<td>8.2</td>
<td>11.5</td>
<td>27.4</td>
<td>40.9</td>
<td>15.9</td>
<td>4.4</td>
</tr>
</tbody>
</table>

b. By gender within Australians

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12-1</td>
<td>23.6</td>
<td>40.2</td>
<td>30.7</td>
<td>5.5</td>
<td>0.0</td>
<td>14.4</td>
<td>30.8</td>
<td>40.4</td>
<td>12.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Q12-2</td>
<td>12.6</td>
<td>33.9</td>
<td>35.4</td>
<td>15.0</td>
<td>3.1</td>
<td>5.8</td>
<td>28.8</td>
<td>26.9</td>
<td>30.8</td>
<td>7.7</td>
</tr>
<tr>
<td>Q12-3</td>
<td>6.3</td>
<td>22.0</td>
<td>45.7</td>
<td>22.8</td>
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<td>1.9</td>
<td>23.1</td>
<td>43.3</td>
<td>28.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Q12-4</td>
<td>11.8</td>
<td>29.1</td>
<td>38.6</td>
<td>15.7</td>
<td>4.7</td>
<td>10.6</td>
<td>27.9</td>
<td>39.4</td>
<td>17.3</td>
<td>4.8</td>
</tr>
<tr>
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<td>2.4</td>
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<td>32.3</td>
<td>38.6</td>
<td>10.2</td>
<td>3.8</td>
<td>26.0</td>
<td>34.6</td>
<td>29.8</td>
<td>5.8</td>
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</table>

c. By gender within Japanese

<table>
<thead>
<tr>
<th>Items</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12-1</td>
<td>15.8</td>
<td>46.1</td>
<td>18.4</td>
<td>15.8</td>
<td>3.9</td>
<td>17.0</td>
<td>38.1</td>
<td>23.9</td>
<td>15.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Q12-2</td>
<td>7.9</td>
<td>51.3</td>
<td>18.4</td>
<td>15.8</td>
<td>6.6</td>
<td>14.2</td>
<td>30.7</td>
<td>30.7</td>
<td>13.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Q12-3</td>
<td>14.5</td>
<td>25.0</td>
<td>42.1</td>
<td>15.8</td>
<td>2.6</td>
<td>10.8</td>
<td>20.5</td>
<td>48.9</td>
<td>17.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Q12-4</td>
<td>6.6</td>
<td>15.8</td>
<td>42.1</td>
<td>31.6</td>
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<td>8.0</td>
<td>18.2</td>
<td>40.3</td>
<td>22.7</td>
<td>10.8</td>
</tr>
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<td>Q12-5</td>
<td>7.9</td>
<td>28.9</td>
<td>40.8</td>
<td>19.7</td>
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<td>13.1</td>
<td>26.7</td>
<td>40.9</td>
<td>14.2</td>
<td>5.1</td>
</tr>
</tbody>
</table>

6.7.1d Q13: Conformity and social harmony

Two questions within Q13 (see table 6.9 for descriptions of Q13-1 and Q13-2) were each designed to measure respondents’ traits of conformity by a single variable. The
respondents were given 5-point Likert scales, where 1 = Disagree and 5 = Agree, and asked to circle the number that reflected their degree of agreement or disagreement.

Table 6.9
2 Observed Items for Q13 (Conformity and Social Harmony)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-1</td>
<td>Overall, I describe myself as a person who conforms to social norms.</td>
</tr>
<tr>
<td>Q13-2</td>
<td>Overall, I describe myself as a person who believes social harmony is more important than individual freedom.</td>
</tr>
</tbody>
</table>

Scores of means (M) and standard deviations (SD) from the two items are reported in table 6.10 by ethnicity, gender within each ethnicity.

Table 6.10
Descriptive Statistics (Mean and Standard Deviation) of Scores of Q13 (Conformity and Social Harmony)

<table>
<thead>
<tr>
<th>Items</th>
<th>Australians</th>
<th>Japanese</th>
<th>Australians</th>
<th>Japanese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ethnicities</td>
<td></td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
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<td>n=231</td>
<td>n=252</td>
<td>n=127</td>
<td>n=104</td>
<td>n=76</td>
</tr>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SD</td>
</tr>
<tr>
<td>Q13-1</td>
<td>3.52 1.021</td>
<td>3.48 1.120</td>
<td>3.63 1.014</td>
<td>3.38 1.016</td>
<td>3.72 0.974</td>
</tr>
<tr>
<td>Q13-2</td>
<td>3.14 0.992</td>
<td>3.31 1.064</td>
<td>3.17 0.982</td>
<td>3.12 1.008</td>
<td>3.41 0.996</td>
</tr>
</tbody>
</table>

The results of the K-S test showed that the two items (Q13-1 and Q13-2) were not normally distributed (p-values: 0.000 and 0.000 respectively).

The non-parametric Mann-Whitney test (p = two-tailed significance) revealed that:

- Australian scores did not differ significantly for agreement level in Q13-1 ($U=28991.50, p=0.937$) from Japanese scores (see table 6.10);
- Japanese scores were significantly higher for agreement level in Q13-2 ($U=25804.00, p=0.025$) than Australian scores (see table 6.10);
- Female Australian scores did not differ significantly for agreement level in Q13-2 ($U=5619.00, p=0.675$) from male Australian scores (see table 6.10);
- Female Australian scores were significantly higher for agreement level in Q13-1 \((U=5619.00, p=0.040)\) than male Australian scores (see table 6.10);
- Female Japanese scores did not differ significantly for agreement level in Q13-2 \((U=6210.00, p=0.346)\) from male Japanese scores (see table 6.10); and
- Female Japanese scores were significantly higher for agreement level in Q13-1 \((U=5560.50, p=0.024)\) than male Japanese scores (see table 6.10).

Tables 6.11a, 6.11b, and 6.11c report relative frequency distributions of each point of the 5-point Likert scale for Q13-1 and Q13-2 by ethnicity, by gender within Australians, and by gender within Japanese respectively.

**Table 6.11**

**Traits of Conformity and Social Harmony (% of counts of each point of 5-point Likert Scale)**

**a. By ethnicity**

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-1</td>
<td>3.9</td>
<td>13.0</td>
<td>25.5</td>
<td>42.9</td>
<td>14.7</td>
<td>6.7</td>
<td>14.7</td>
<td>17.5</td>
<td>46.0</td>
<td>15.1</td>
</tr>
<tr>
<td>Q13-2</td>
<td>3.9</td>
<td>22.5</td>
<td>37.7</td>
<td>27.3</td>
<td>8.7</td>
<td>6.7</td>
<td>14.7</td>
<td>29.8</td>
<td>38.1</td>
<td>10.7</td>
</tr>
</tbody>
</table>

**b. By gender within Australians**

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-1</td>
<td>4.7</td>
<td>7.9</td>
<td>24.4</td>
<td>45.7</td>
<td>17.3</td>
<td>2.9</td>
<td>19.2</td>
<td>26.9</td>
<td>39.4</td>
<td>11.5</td>
</tr>
<tr>
<td>Q13-2</td>
<td>3.9</td>
<td>20.5</td>
<td>39.4</td>
<td>27.6</td>
<td>8.7</td>
<td>3.8</td>
<td>25.0</td>
<td>35.6</td>
<td>26.9</td>
<td>8.7</td>
</tr>
</tbody>
</table>

**c. By gender within Japanese**

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-1</td>
<td>1.3</td>
<td>15.8</td>
<td>9.2</td>
<td>56.6</td>
<td>17.1</td>
<td>9.1</td>
<td>14.2</td>
<td>21.0</td>
<td>41.5</td>
<td>14.2</td>
</tr>
<tr>
<td>Q13-2</td>
<td>5.3</td>
<td>11.8</td>
<td>28.9</td>
<td>44.7</td>
<td>9.2</td>
<td>7.4</td>
<td>15.9</td>
<td>30.1</td>
<td>35.2</td>
<td>11.4</td>
</tr>
</tbody>
</table>

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As can be seen from the tables:

- There was no evidence of bimodal patterns within a gender or ethnicity;
- For Q13-1, the mode was ‘4’ through all the groups (42.9% of the Australian respondents, 46.0% of the Japanese respondents, 45.7% of the female Australian respondents, 39.4% of the male Australian respondents, 56.6% of the female Japanese respondents, and 41.5% of the male Japanese respondents); and
- For Q13-2, the mode was ‘3’ in Australian respondents (37.7%), female Australian respondents (39.4%), and male Australian respondents (35.6%). However, the mode was ‘4’ in Japanese respondents (38.1%), female Japanese respondents (44.7%), and male Japanese respondents (35.2%).

### 6.7.1e Q13: Importance of individual freedom

Two questions within Q13 (see table 6.12 for descriptions of Q13-3 and Q13-4) were each designed to measure respondents’ levels of importance of individual freedom by a single variable. The respondents were given 5-point Likert scales, where 1 = Disagree and 5 = Agree, and asked to circle the number that reflected their degree of agreement or disagreement.

#### Table 6.12
2 Observed Items for Q13 (Importance of Individual Freedom)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>Generally, individual freedom is one of the most important values in our society.</td>
</tr>
<tr>
<td>Q13-4</td>
<td>Individual freedom is one of the most important values for me.</td>
</tr>
</tbody>
</table>

Scores of means (M) and standard deviations (SD) from the two items are reported in table 6.13 by ethnicity, gender within each ethnicity.
The results of the K-S test showed that the two items (Q13-3 and Q13-4) were not normally distributed (p-values: 0.000 and 0.000 respectively).

The non-parametric Mann-Whitney test revealed (p = one-tailed significance) that:

- Australian scores did not differ significantly for importance level in Q13-3 (\(U=27582.00, p=0.148\)) from Japanese scores (see table 6.13);
- Australian scores were significantly higher for importance level in Q13-4 (\(U=23681.00, p=0.000\)) than Japanese scores (see table 6.13);
- Female Australian scores did not differ significantly for importance levels in Q13-3 (\(U=6088.00, p=0.137\)) and Q13-4 (\(U=6368.50, p=0.309\)) from male Australian scores (see details in table 6.13);
- Female Japanese scores did not differ significantly for importance level in Q13-3 (\(U=6335.50, p=0.242\)) from male Japanese scores (see table 6.13); and
- Male Japanese scores were significantly higher for importance level in Q13-4 (\(U=5245.50, p=0.003\)) than female Japanese scores (see table 6.13).

Tables 6.14a, 6.14b, and 6.14c report relative frequency distributions of each point of the 5-point Likert scale for Q13-3 and Q13-4 by ethnicity, by gender within Australians, and by gender within Japanese respectively.
Table 6.14  
Importance of Individual Freedom (% of counts of each point of 5-point Likert Scale)

a. By ethnicity

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>0.9</td>
<td>3.9</td>
<td>22.9</td>
<td>52.8</td>
<td>19.5</td>
</tr>
<tr>
<td>Q13-4</td>
<td>0.9</td>
<td>2.6</td>
<td>23.8</td>
<td>45.0</td>
<td>27.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>2.0</td>
<td>7.9</td>
<td>25.8</td>
<td>41.7</td>
<td>22.6</td>
</tr>
<tr>
<td>Q13-4</td>
<td>3.6</td>
<td>10.3</td>
<td>31.0</td>
<td>32.5</td>
<td>22.6</td>
</tr>
</tbody>
</table>

b. By gender within Australians

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>0.0</td>
<td>3.9</td>
<td>25.2</td>
<td>55.1</td>
<td>15.7</td>
</tr>
<tr>
<td>Q13-4</td>
<td>0.0</td>
<td>3.9</td>
<td>22.0</td>
<td>49.6</td>
<td>24.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>1.9</td>
<td>3.8</td>
<td>20.2</td>
<td>50.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Q13-4</td>
<td>1.9</td>
<td>1.0</td>
<td>26.0</td>
<td>39.4</td>
<td>31.7</td>
</tr>
</tbody>
</table>

c. By gender within Japanese

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>1.3</td>
<td>9.2</td>
<td>28.9</td>
<td>39.5</td>
<td>21.1</td>
</tr>
<tr>
<td>Q13-4</td>
<td>2.6</td>
<td>17.1</td>
<td>38.2</td>
<td>27.6</td>
<td>14.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13-3</td>
<td>2.3</td>
<td>7.4</td>
<td>24.4</td>
<td>42.6</td>
<td>23.3</td>
</tr>
<tr>
<td>Q13-4</td>
<td>3.6</td>
<td>10.3</td>
<td>31.0</td>
<td>32.5</td>
<td>22.6</td>
</tr>
</tbody>
</table>

As can be seen from the tables above:

- There was no evidence of bimodal patterns within a gender or ethnicity;
- For Q13-3, the mode was ‘4’ through all the groups (52.8% of the Australian respondents, 41.7% of the Japanese respondents, 55.1% of the female Australian respondents, 50.0% of the male Australian respondents, 39.5% of the female Japanese respondents, and 42.6% of the male Japanese respondents); and
- For Q13-4, the mode was ‘4’ in Australian respondents (45.0%), Japanese respondents (32.5%), female Australian respondents (49.6%), and male Australian respondents (39.4%), and male Japanese respondents (32.5%). However, the mode was ‘3’ in female Japanese respondents (38.2%).
6.7.1f Q8 and Q9: Concepts of individual freedom

Q8 and Q9 were designed to understand how Australian and Japanese university students perceive concepts of ‘individual freedom’ and allow comparisons between the two groups. This was considered important to interpret the results as some questions used ‘individual freedom’ (Q13-2, Q13-3, Q13-4, and two questions, VA1 and VA2, of Q10) and to allow for discussion of the role of values related to individual freedom.

Descriptions of the two questions are presented in table 6.15. The respondents were asked to give three similar and three opposite words or phrases towards a word ‘individual freedom’.

Table 6.15
2 Descriptive Questions of Q8 and Q9 (Similar and Opposite Concepts of Individual Freedom)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8</td>
<td>When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express a SIMILAR concept?</td>
</tr>
<tr>
<td>Q9</td>
<td>When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express and OPPOSITE concept?</td>
</tr>
</tbody>
</table>

Collected words and phrases were analysed as described in section 6.6.1 of this chapter. For the similar concepts, 0.9% of Australian and 8.7% of Japanese respondents did not provide any words or phrases, while 95.2% of Australian and 73.8% of Japanese respondents wrote three words or phrases. However, when the meanings of words and phrases overlapped for the same respondent, these were counted as one occurrence. In addition, inexplicable words and phrases were excluded from the analysis. Accordingly, 645 English and 535 Japanese words and phrases were analysed and grouped based on their meaning.

For the opposite concepts, 3.9% of Australian and 7.1% of Japanese respondents did not provide any words or phrases, while 87.9% of Australian and 76.2% of Japanese respondents wrote three words or phrases. After screening the obtained words and phrases as for similar concepts, 537 English and 516 Japanese words and phrases were
analysed and grouped based on their meaning. Full results of these grouping are reported in the four tables of appendix 6A.

The important findings of the qualitative analyses were:

- It appeared that, to both Australian and Japanese university students, the main opposite concept to ‘individual freedom’ was being controlled by others;
- It appeared that, to both Australian and Japanese university students, individual freedom mainly meant a state being not controlled by others (i.e. 'freedom from'; Berlin, 1969) and an ability to be an individual (i.e. 'freedom to'; Berlin, 1969); and
- However, as suggested by literature (e.g. Doi, 1981; Nakane, 1973; Wierzbicka, 1997) and the pilot study, Japanese university students appeared to have negative attitudes towards ‘individual freedom’ as, for example, it reflected selfish.

These findings suggested that when Australian and Japanese university students use ‘individual freedom’, interpretation of their intended meaning should take account the difference in their perceptions of the expression.

### 6.7.2 Main analyses: Hypothesis testing

Research hypotheses in section 6.1 of this chapter were tested, using variables for 26 items. Table 6.16 shows the descriptions of the 26 items. Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. That is, GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV had eight multiple items, ED, PR, and PT had four each, and VA had six multiple items (26 items in total), based on which the number was allocated to each item within each predicted latent factor. The 26 items were randomly ordered in a questionnaire, using a table of random numbers. Respondents were given 5-point Likert scales, where 1 = Disagree and 5 = Agree, and asked to circle the number that reflected their degree of agreement or disagreement. GV5, VA2, VA3, VA4, and
VA5 were reverse items so that their original scores were reversed using the transform function of SPSS Statistics 17.0.
<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV1</td>
<td>The Government should spend taxpayers’ money to solve social issues.</td>
</tr>
<tr>
<td>GV2</td>
<td>The Government sponsors social campaigns for the public good.</td>
</tr>
<tr>
<td>GV3</td>
<td>Government-sponsored social campaigns have had some influence on my behaviours.</td>
</tr>
<tr>
<td>GV4</td>
<td>I care about social issues even if they are not related to me directly.</td>
</tr>
<tr>
<td>GV5</td>
<td>The Government has the right to tell us what to do or not to do.</td>
</tr>
<tr>
<td>GV6</td>
<td>The role of the Government is to tell us how to lead our lives.</td>
</tr>
<tr>
<td>GV7</td>
<td>The Government has a responsibility to protect and promote the public good.</td>
</tr>
<tr>
<td>GV8</td>
<td>The Government has a responsibility to reduce risks caused by social issues.</td>
</tr>
<tr>
<td>ED1</td>
<td>When I need information about a social issue, I would find out what the Government says about it first.</td>
</tr>
<tr>
<td>ED2</td>
<td>Information provided by the Government increases our awareness of social issues.</td>
</tr>
<tr>
<td>ED3</td>
<td>The Government has responsibility to educate us on socially desirable behaviours.</td>
</tr>
<tr>
<td>ED4</td>
<td>Information coming from a government department is likely to be true.</td>
</tr>
<tr>
<td>PR1</td>
<td>The Government needs to provide us with practical information about how to adopt socially desirable behaviours.</td>
</tr>
<tr>
<td>PR2</td>
<td>The Government can effectively encourage us to achieve socially desirable behaviours.</td>
</tr>
<tr>
<td>PR3</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us some incentives.</td>
</tr>
<tr>
<td>PR4</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us with social infrastructure that facilitates those behaviours.</td>
</tr>
<tr>
<td>PT1</td>
<td>I can do the right thing, so other people must be able to do the right thing, too.</td>
</tr>
<tr>
<td>PT2</td>
<td>It’s OK for the Government to restrict individual choices in order to solve social issues.</td>
</tr>
<tr>
<td>PT3</td>
<td>To keep social order, the Government has to control people to some extent.</td>
</tr>
<tr>
<td>PT4</td>
<td>Government regulations are an effective way to achieve social order.</td>
</tr>
<tr>
<td>VA1</td>
<td>Individual freedom can be achieved but not at the expense of social harmony.</td>
</tr>
<tr>
<td>VA2</td>
<td>If I don’t want to do something, I shouldn’t have to do it.</td>
</tr>
<tr>
<td>VA3</td>
<td>No one can tell me what to do or what not to do.</td>
</tr>
<tr>
<td>VA4</td>
<td>If I want to do something, I should be able to do it.</td>
</tr>
<tr>
<td>VA5</td>
<td>I should be able to do something as long as I don’t cause anyone else any harm.</td>
</tr>
<tr>
<td>VA6</td>
<td>For the good of our communities, sometimes it is necessary to restrain an individual’s freedom.</td>
</tr>
</tbody>
</table>

**NOTE.** Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV has eight items, ED, PR, and PT have four items, and VA has six items each.

* reversed items
6.7.2a Examination of 26 items

As the first step of the main analyses, statistical properties of the scores from the 26 items were assessed on missing data, descriptive statistics, normality of the data, and data homogeneity by ethnicity and by gender within each ethnicity.

As mentioned in detail in section 6.6.2 Statistical analyses, there were 43 missing values out of 12,558 expected total values (i.e. 26 variables × 483 valid respondents). Structural equation modeling methods that were selected for this study cannot handle missing data; therefore, considering the fact that the number of missing values of this study was extremely small (0.3%), they were replaced by the mean calculated from other valid values of each variable.

Table 6.17 shows scores of means (M) and standard deviations (SD) from the 26 items by ethnicity and by gender within each ethnicity. The minimum value was 1 and maximum value was 5 for all the 26 items through all the groups.
### Table 6.17
Descriptive Statistics (Mean and Standard Deviation) of Scores of 26 items

<table>
<thead>
<tr>
<th>Items</th>
<th>Ethnicities</th>
<th></th>
<th>Ethnicities</th>
<th></th>
<th>Ethnicities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australians</td>
<td>Japanese</td>
<td>Australians</td>
<td>Japanese</td>
<td>Australians</td>
<td>Japanese</td>
</tr>
<tr>
<td></td>
<td>$n=231$</td>
<td>$n=252$</td>
<td>$n=127$</td>
<td>$n=104$</td>
<td>$n=76$</td>
<td>$n=176$</td>
</tr>
<tr>
<td>GV1</td>
<td>M 3.37</td>
<td>SD 0.967</td>
<td>M 3.38</td>
<td>SD 0.959</td>
<td>M 3.36</td>
<td>SD 0.981</td>
</tr>
<tr>
<td>GV2</td>
<td>M 3.36</td>
<td>SD 0.901</td>
<td>M 3.45</td>
<td>SD 0.878</td>
<td>M 3.24</td>
<td>SD 0.919</td>
</tr>
<tr>
<td>GV3</td>
<td>M 3.09</td>
<td>SD 0.994</td>
<td>M 3.22</td>
<td>SD 0.933</td>
<td>M 2.93</td>
<td>SD 1.045</td>
</tr>
<tr>
<td>GV4</td>
<td>M 3.83</td>
<td>SD 0.844</td>
<td>M 4.01</td>
<td>SD 0.718</td>
<td>M 3.63</td>
<td>SD 0.937</td>
</tr>
<tr>
<td>GV5*</td>
<td>M 3.16</td>
<td>SD 0.988</td>
<td>M 3.13</td>
<td>SD 1.000</td>
<td>M 3.19</td>
<td>SD 0.976</td>
</tr>
<tr>
<td>GV6</td>
<td>M 1.83</td>
<td>SD 0.950</td>
<td>M 1.80</td>
<td>SD 0.854</td>
<td>M 1.88</td>
<td>SD 1.058</td>
</tr>
<tr>
<td>GV7</td>
<td>M 4.15</td>
<td>SD 0.790</td>
<td>M 4.15</td>
<td>SD 0.817</td>
<td>M 4.16</td>
<td>SD 0.760</td>
</tr>
<tr>
<td>GV8</td>
<td>M 3.93</td>
<td>SD 0.752</td>
<td>M 3.97</td>
<td>SD 0.734</td>
<td>M 3.89</td>
<td>SD 0.775</td>
</tr>
<tr>
<td>ED1</td>
<td>M 2.34</td>
<td>SD 1.063</td>
<td>M 2.19</td>
<td>SD 1.052</td>
<td>M 2.53</td>
<td>SD 1.052</td>
</tr>
<tr>
<td>ED2</td>
<td>M 3.58</td>
<td>SD 0.904</td>
<td>M 3.66</td>
<td>SD 0.928</td>
<td>M 3.49</td>
<td>SD 0.870</td>
</tr>
<tr>
<td>ED3</td>
<td>M 3.64</td>
<td>SD 0.901</td>
<td>M 3.77</td>
<td>SD 0.828</td>
<td>M 3.49</td>
<td>SD 0.965</td>
</tr>
<tr>
<td>ED4</td>
<td>M 2.90</td>
<td>SD 1.052</td>
<td>M 2.85</td>
<td>SD 1.077</td>
<td>M 2.96</td>
<td>SD 1.023</td>
</tr>
<tr>
<td>PR1</td>
<td>M 3.23</td>
<td>SD 0.971</td>
<td>M 3.25</td>
<td>SD 0.973</td>
<td>M 3.21</td>
<td>SD 0.972</td>
</tr>
<tr>
<td>PR2</td>
<td>M 3.42</td>
<td>SD 0.928</td>
<td>M 3.46</td>
<td>SD 0.861</td>
<td>M 3.37</td>
<td>SD 1.005</td>
</tr>
<tr>
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<td>M 3.39</td>
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<td>M 3.29</td>
<td>SD 1.047</td>
<td>M 3.50</td>
<td>SD 0.985</td>
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<td>PR4</td>
<td>M 3.71</td>
<td>SD 0.875</td>
<td>M 3.74</td>
<td>SD 0.779</td>
<td>M 3.66</td>
<td>SD 0.981</td>
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<td>M 3.68</td>
<td>SD 1.205</td>
<td>M 3.65</td>
<td>SD 1.230</td>
<td>M 3.72</td>
<td>SD 1.178</td>
</tr>
<tr>
<td>PT2</td>
<td>M 2.66</td>
<td>SD 1.029</td>
<td>M 2.57</td>
<td>SD 1.051</td>
<td>M 2.78</td>
<td>SD 0.995</td>
</tr>
<tr>
<td>PT3</td>
<td>M 3.70</td>
<td>SD 0.891</td>
<td>M 3.69</td>
<td>SD 0.812</td>
<td>M 3.70</td>
<td>SD 0.984</td>
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<tr>
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<td>M 3.32</td>
<td>SD 0.894</td>
<td>M 3.35</td>
<td>SD 0.896</td>
<td>M 3.27</td>
<td>SD 0.895</td>
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<tr>
<td>VA1</td>
<td>M 3.42</td>
<td>SD 0.970</td>
<td>M 3.50</td>
<td>SD 0.933</td>
<td>M 3.33</td>
<td>SD 1.009</td>
</tr>
<tr>
<td>VA2*</td>
<td>M 2.66</td>
<td>SD 1.237</td>
<td>M 2.69</td>
<td>SD 1.192</td>
<td>M 2.62</td>
<td>SD 1.295</td>
</tr>
<tr>
<td>VA3*</td>
<td>M 3.11</td>
<td>SD 1.101</td>
<td>M 3.19</td>
<td>SD 1.103</td>
<td>M 3.02</td>
<td>SD 1.097</td>
</tr>
<tr>
<td>VA4*</td>
<td>M 2.36</td>
<td>SD 0.852</td>
<td>M 2.41</td>
<td>SD 0.894</td>
<td>M 2.30</td>
<td>SD 0.798</td>
</tr>
<tr>
<td>VA5*</td>
<td>M 2.10</td>
<td>SD 0.971</td>
<td>M 2.11</td>
<td>SD 0.986</td>
<td>M 2.09</td>
<td>SD 0.956</td>
</tr>
<tr>
<td>VA6</td>
<td>M 3.42</td>
<td>SD 1.009</td>
<td>M 3.31</td>
<td>SD 0.998</td>
<td>M 3.55</td>
<td>SD 1.013</td>
</tr>
</tbody>
</table>

**NOTE.** Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV has eight items, ED, PR, and PT have four items, and VA has six items each.

* = reversed items

The results of the Kolmogorov-Smirnov (K-S) test showed that all of the 26 items were non-normally distributed (p-values: 0.000 for all the items).
The non-parametric Mann-Whitney test revealed:

- Australian scores did not differ significantly in GV3 ($U=28136.50, p=0.510$), GV5* ($U=27193.50, p=0.196$), GV7 ($U=27412.00, p=0.233$), GV8 ($U=27099.50, p=0.158$), ED2 ($U=28285.00, p=0.573$), PT3 ($U=26420.50, p=0.062$), and VA5* ($U=27595.50, p=0.304$) from Japanese scores (see table 6.17);
- Australian scores were significantly higher in GV2 ($U=21965.00, p=0.000$), GV4 ($U=25403.00, p=0.010$), ED3 ($U=24544.00, p=0.001$), ED4 ($U=20516.50, p=0.000$), PR2 ($U=23934.00, p=0.000$), PT1 ($U=14965.50, p=0.000$), VA3* ($U=16928.50, p=0.000$), and VA6 ($U=25774.50, p=0.023$) than Japanese scores (see table 6.17);
- Japanese scores were significantly higher in GV1 ($U=20739.50, p=0.000$), GV6 ($U=19597.50, p=0.000$), ED1 ($U=18286.50, p=0.000$), PR1 ($U=23000.00, p=0.000$), PR3 ($U=24109.50, p=0.000$), PR4 ($U=23108.50, p=0.000$), PT2 ($U=23964.00, p=0.000$), PT4 ($U=17526.50, p=0.000$), VA1 ($U=20739.50, p=0.000$), VA2* ($U=18332.00, p=0.000$), and VA4* ($U=21568.00, p=0.000$) than Australian scores (see table 6.17);
- Female Australian scores did not differ significantly in GV1 ($U=6522.00, p=0.864$), GV2 ($U=5848.50, p=0.111$), GV5* ($U=6549.50, p=0.910$), GV6 ($U=6600.00, p=0.993$), GV7 ($U=6602.00, p=0.997$), GV8 ($U=6172.500, p=0.348$), ED2 ($U=5847.00, p=0.111$), ED4 ($U=6316.00, p=0.553$), PR1 ($U=6405.00, p=0.680$), PR2 ($U=6410.00, p=0.684$), PR3 ($U=5910.00, p=0.150$), PR4 ($U=6441.00, p=0.733$), PT1 ($U=6452.00, p=0.755$), PT2 ($U=5785.00, p=0.091$), PT3 ($U=6399.50, p=0.667$), PT4 ($U=6266.00, p=0.475$), VA1 ($U=6038.00, p=0.237$), VA2* ($U=6347.00, p=0.601$), VA3* ($U=5997.00, p=0.215$), VA4* ($U=6322.00, p=0.552$), VA5* ($U=6510.00, p=0.845$), VA6 ($U=5857.00, p=0.122$) from male Australian scores (see table 6.17);
- Female Australian scores were significantly higher in GV3 ($U=5517.50, p=0.025$), GV4 ($U=5051.00, p=0.001$), and ED3 ($U=5545.50, p=0.025$) than male Australian scores (see table 6.17);
- Male Australian scores were significantly higher in ED1 ($U=5309.00, p=0.008$); and
- Female Japanese scores did not differ significantly in all of the 26 items from male Japanese scores: GV1 ($U=5747.00, p=0.062$), GV2 ($U=6418.50, p=0.595$),
GV3 (U=5849.50, p=0.101), GV4 (U=6545.50, p=0.778), GV5* (U=6231.50, p=0.3476), GV6 (U=6497.00, p=0.709), GV7 (U=6440.00, p=0.616), GV8 (U=5795.50, p=0.073), ED1 (U=6359.50, p=0.522), ED2 (U=5713.50, p=0.055), ED3 (U=6324.50, p=0.466), ED4 (U=6066.50, p=0.218), PR1 (U=6387.00, p=0.556), PR2 (U=6058.50, p=0.220), PR3 (U=6223.00, p=0.350), PR4 (U=5912.50, p=0.118), PT1 (U=6066.00, p=0.228), PT2 (U=6238.50, p=0.380), PT3 (U=6563.00, p=0.802), PT4 (U=6410.00, p=0.571), VA1 (U=6596.00, p=0.858), VA2* (U=6595.00, p=0.857), VA3* (U=6260.00, p=0.401), VA4* (U=5934.50, p=0.145), VA5* (U=5966.50, p=0.159), and VA6 (U=6155.00, p=0.295) (see table 6.17).

Considering these results, it appeared justified to regard female and male Australian respondents as the same group, as were female and male Japanese respondents. Accordingly, the rest of the main statistical analyses were made by two groups: Australian and Japanese university students aged between 18 and 23 years, focusing on similarities and differences between the two ethnicities.

6.7.2b Measurement model development: EFA and reliability test

Exploratory Factor Analysis (EFA) was used to develop measurement models of 1) readiness to accept government’s social marketing approaches, 2) readiness to accept government involvement in social marketing activities, and 3) values related to the freedom of the individual, based on scores from 26 items of Q10.

Before proceeding to EFA, descriptive statistics from the 26 items were further analysed by ethnicity to check floor or ceiling effects by the statistic tests \((\text{mean} - \text{SD}) < 1 = \text{floor effect}\) and \((\text{mean} + \text{SD}) > 5 = \text{ceiling effect}\). All of the scores from the 26 items except for Australian scores from GV6 had no floor or ceiling effects. Australian scores from GV6 appeared to have a floor effect: \((1.83 - 0.95) = 0.88 < 1\). However, considering comparability was kept as equal as possible between Australian and Japanese scores, Australian scores from GV6 were provisionally included in the EFA, bearing in mind that Australian GV6 could be the first candidate for elimination.
Factors were extracted by principal axis factoring (PAF) method in all of the EFAs for this study. Principal component analysis (PCA) is typically selected by the most statistical computer programs as the default method for EFA (Hair et al., 2006) and PCA has been widely used in the first place as EFA (Field, 2005). However, PCA did not sit well with this study because of its main purposes. In PCA, summarising all of the observed variables into a minimum number of dimensions is the main purpose (Hair et al., 2006). In contrast, the purposes of EFA for this study were not only to summarise observed variables under common factors, but also to identify and select hypothesised dimensions of interest from the observed variables. This required data reduction where common factor analysis (FA), including PAF, is more useful, as its main interest is communalities of the observed variables towards the latent variable(s), than PCA that uses total variance (Hair et al., 2006). In addition, models that use common variance rather than total variance agree with SEM measurement models (Blunch, 2008).

The number of factors was determined based on two criteria: initial eigenvalues (>1.0) and the scree test. Although use of eigenvalue-based-criteria has been criticised as it tends to hold too many factors (Costello & Osborne, 2005), Field (2005) emphasised that factors should not be chosen based on scree test alone as eigenvalues larger than 1 give valuable information about alternative influences on a factor.

It was preferable to use an oblique rotation method for scale development for SEM measurement models (Hair et al., 2006), which was a case of this study. However, tentative EFAs with oblique and orthogonal rotation methods found the VARIMAX method gaining the best solution. Although this was not an ideal selection, considering the situations of a PhD project with limited time and resources, the VARIMAX method appeared best and was used for factor rotations in the main study.

Factor loadings were assessed on a basis of Guidelines for Identifying Significant Factor Loadings Based on Sample Size (BMDP Statistical Software Inc., 1993) and were computed based on a 0.05 significance level, a power level of 80 percent, and standard errors assumed to be twice those of conventional correlation coefficients (Hair et al., 2006). According to the guidelines, a factor loading of 0.40 is significant when a sample
size is 200 and 0.35 for 250. Considering the number of 231 Australian and 252 Japanese respondents, this study regarded a factor loading 0.35 as a significant cut-off for the Japanese scores and 0.37 for the Australian scores. In addition to these guidelines, the number of observed variables underlying the factors was also taken into account as suggested by Costello and Osborne (2005). An observed variable that reflected a factor by itself was regarded as an object of elimination, even though it has a factor loading exceeding 0.37 for Australian EFAs and 0.35 for Japanese EFAs.

EFA assumptions and sampling adequacy were tested, based on the determinant of correlation matrix (>0.00001), KMO statistic (>0.5) with significant Bartlett’s test of sphericity (<0.05), and measures of sampling adequacy value of each item on anti-image matrices (>0.5), using SPSS Statistics 17.0, following suggestions by Field (2005) and Hair et al (2006). All of the EFAs in the main analyses met these assumptions. Statistics for these tests are included in tables of EFA results in the following sections.

Internal consistency of each factor was tested, using Cronbach’s alpha coefficients. In general, for a cognitive test such as intelligence tests, a Cronbach’s alpha value of 0.8 is needed for acceptance; however, values below even 0.7 could be more realistic for psychological constructs and exploratory study (Hair et al., 2006; Kline, 1999). In addition, evaluation of attitude and personality scales, including this study, should not rely on single criteria (Robinson, Shaver, & Wrightsman, 1991). Therefore, this study did not set a particular cut-off value of Cronbach’s alpha; however, reliability of a scale was considered, taking into account both the values and factor analysis solutions.

The results of each test are reported under concepts of interest below.

**Readiness to accept government’s social marketing approaches**

Australian and Japanese scores from 12 items (ED1, ED2, ED3, ED4, PR1, PR2, PR3, PR4, PT1, PT2, PT3, and PT4) were exploratory-factor-analysed to investigate conceptual constructs of readiness to accept government’s social marketing approaches. The Australian results are reported first, and then the Japanese results.
Australian readiness to accept government’s social marketing approaches

Initial PAF extracted four factors; therefore, retaining this number of factors, the first VARIMAX-rotated PAF analysis was performed on Australian scores from the 12 variables (see table 6.16 for an overview of the wording of the variables).

Table 6.18 provides the statistics of the assumption tests, the number of factors, and the factor loadings yielded by the first analysis. Factor loadings that exceeded 0.37 are in bold type. As seen in the table, PR3 had no significant factor loading (i.e. exceeding 0.37). Therefore, PR3 was eliminated and the second VARIMAX-rotated PAF analysis was performed on Australian scores from the remaining 11 variables.

Table 6.18
First VARIMAX-rotated Principal Axis Factoring Loadings of 12 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>F4*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED3</td>
<td>.68</td>
<td>.23</td>
<td>.19</td>
<td>.01</td>
<td>.55</td>
</tr>
<tr>
<td>PR4</td>
<td>.60</td>
<td>.15</td>
<td>.08</td>
<td>.16</td>
<td>.41</td>
</tr>
<tr>
<td>ED2</td>
<td>.40</td>
<td>.09</td>
<td>.27</td>
<td>-.19</td>
<td>.27</td>
</tr>
<tr>
<td>PR1</td>
<td>.20</td>
<td>.79</td>
<td>.09</td>
<td>.18</td>
<td>.71</td>
</tr>
<tr>
<td>PR2</td>
<td>.17</td>
<td>.53</td>
<td>.26</td>
<td>-.24</td>
<td>.43</td>
</tr>
<tr>
<td>PR3</td>
<td>.18</td>
<td>.27</td>
<td>-.01</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>PT2</td>
<td>.12</td>
<td>.03</td>
<td>.45</td>
<td>.06</td>
<td>.27</td>
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<tr>
<td>ED4</td>
<td>.01</td>
<td>.05</td>
<td>.47</td>
<td>-.10</td>
<td>.23</td>
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<tr>
<td>PT3</td>
<td>.28</td>
<td>.09</td>
<td>.44</td>
<td>.26</td>
<td>.34</td>
</tr>
<tr>
<td>PT4</td>
<td>.24</td>
<td>.12</td>
<td>.43</td>
<td>.07</td>
<td>.26</td>
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<td>.35</td>
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<td>.01</td>
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</tr>
<tr>
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<td>.03</td>
<td>.05</td>
<td>.04</td>
<td>.46</td>
<td>.21</td>
</tr>
</tbody>
</table>

Note. * = Factor loading > .37 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .174
- KMO = .758
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50
In the second VARIMAX-rotated PAF analysis, all of the Australian scores from the 11 items had factor loadings exceeding 0.37 towards any of the factors in the second analysis (see table 6B.1 of appendix 6B for details of the results). However, the fourth factor reflected only one variable (PT1) and PT1 only had significant factor loading on the fourth factor. Therefore, PT1 was eliminated and the third VARIMAX-rotated PAF analysis was performed on Australian scores from the 10 items (see table 6.16 for an overview of the wording of the variables).

The third VARIMAX-rotated PAF analysis extracted three factors and all of the items, except for ED2, had significant factor loadings towards any of the factors. However, ED2 had factor loading 0.36 which was close to 0.37 towards the first factor, having only 0.25 or less towards other factors, ED2 was provisionally retained under the first factor. Accordingly, the factor solution obtained from the third analysis was accepted and Cronbach’s alpha values were computed, based on the solution.

Table 6.19 provides the outcomes the final (third) PAF. Factor loadings that exceeded 0.37 are in bold type. Cronbach’s alpha values for each construct are reported above the rows for factor loadings in the table.
Table 6.19
Third VARIMAX-rotated Principal Axis Factoring Loadings of 10 Items and Cronbach’s Alpha Values of Three Factors (Australian n = 231)

<table>
<thead>
<tr>
<th>Factors</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>Com**</th>
</tr>
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<tbody>
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<td>Cronbach’s alpha values</td>
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<td>.59</td>
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<td>Variables</td>
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<td></td>
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<td>ED3</td>
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<td>.16</td>
<td>.53</td>
</tr>
<tr>
<td>PR4</td>
<td>.62</td>
<td>.14</td>
<td>.04</td>
<td>.40</td>
</tr>
<tr>
<td>ED2</td>
<td>.36</td>
<td>.10</td>
<td>.25</td>
<td>.20</td>
</tr>
<tr>
<td>PR1</td>
<td>.25</td>
<td>.79</td>
<td>.02</td>
<td>.68</td>
</tr>
<tr>
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<td>.26</td>
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<td>ED1</td>
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<td>.28</td>
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<tr>
<td>PT3</td>
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<td>.13</td>
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<td>.26</td>
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<td>Eigenvalues</td>
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<td>1.21</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Contribution (%)</td>
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<td>10.08</td>
<td>9.83</td>
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<tr>
<td>Cumulative contribution (%)</td>
<td>10.15</td>
<td>20.23</td>
<td>30.06</td>
<td></td>
</tr>
</tbody>
</table>

Note. * = Factor loading >.37 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .210
- KMO = .762
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50

The factor loading patterns of the final factor analysis revealed that the data did not match the hypothesised constructs of readiness to accept government’s social marketing approaches. However, when the patterns were closely examined with the wording of each variable, the three factors appeared to reflect the government’s three approaches (Education, Promotion, and Paternalism) as hypothesised. Based on these representative appropriateness of an abstract concept of each factor, F1 was labelled as ‘PR’ (readiness to accept government’s promotional social marketing approach), F2 as ‘ED’ (readiness to accept government’s educational social marketing approach), and F3 as ‘PT’ (readiness to accept government’s paternalistic social marketing approach). To maintain objectivity in labelling the factors, labelling procedures were observed by the researcher’s principal supervisor and several options were discussed until the researcher and the supervisor reached agreement.
Japanese readiness to accept government’s social marketing approaches

Initial PAF extracted four factors; therefore, retaining this number of factors, the first VARIMAX-rotated PAF analysis was performed on Japanese scores from the 12 variables (see table 6.16 for an overview of the wording of the variables).

Table 6.20 provides the statistics of the assumption tests, the number of factors, and the factor loadings yielded by the first analysis. Factor loadings that exceeded 0.35 are in bold type. As seen in the table, ED2, PT2, and ED1 had no significant loadings to any factor; therefore, these three variables were eliminated, and the second VARIMAX-rotated PAF analysis was performed on Japanese scores from the remaining nine variables.

Table 6.20
First VARIMAX-rotated Principal Axis Factoring Loadings of 12 Items
(Japanese n = 252)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>F4*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT3</td>
<td>.50</td>
<td>.29</td>
<td>-.03</td>
<td>-.01</td>
<td>.21</td>
</tr>
<tr>
<td>PT4</td>
<td>.49</td>
<td>.06</td>
<td>.04</td>
<td>-.02</td>
<td>.24</td>
</tr>
<tr>
<td>PR3</td>
<td>.42</td>
<td>-.04</td>
<td>-.07</td>
<td>.37</td>
<td>.32</td>
</tr>
<tr>
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<td>.23</td>
<td>-.13</td>
<td>.02</td>
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<td>.43</td>
<td>-.09</td>
<td>.21</td>
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<td>-.04</td>
<td>.42</td>
<td>.04</td>
<td>.21</td>
</tr>
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<td>-.01</td>
<td>-.04</td>
<td>.24</td>
<td>.20</td>
<td>.10</td>
</tr>
<tr>
<td>PR1</td>
<td>-.02</td>
<td>.30</td>
<td>.09</td>
<td>.53</td>
<td>.37</td>
</tr>
</tbody>
</table>

|                  |     |     |     |     |       |
| Eigenvalues      | 1.04| .98 | .77 | .65 |       |
| Contribution (%) | 8.70| 8.15| 6.45| 5.40|       |
| Cumulative contribuition (%) | 8.70| 16.85| 23.30| 28.70|       |

Note. * = Factor loading >.35 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .317
- KMO = .647
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50
The second analysis extracted three factors (see table 6B.2 of appendix 6B for details of the results). PR3 had no significant loadings to any factor; therefore, it was eliminated from the next analysis. In addition, PR1 was also eliminated from the following analysis. PR1 had a high loading (0.86) towards the second factor and communality (0.76); however, only PR1 was reflected by the factor and had no significant factor loading towards any of other factors. Although this could mean that F2 represented readiness to accept government’s promotional social marketing approach, it appeared unreliable to measure readiness level of the promotional approach by a single variable; PR1 alone. This convinced the researcher to eliminate PR1 and to focus on two other factors, F1 and F3, which had multiple-variables. Accordingly, third VARIMAX-rotated principal axis factor analysis was performed with two factors on the Japanese scores from seven variables.

In the third analysis, all of the variables had factor loadings exceeding 0.35 towards either of the factors. Accordingly, the factor solution obtained from the third analysis was accepted. Table 6.21 presents the outcomes for the third PAF analysis on Japanese scores from the seven items (see table 6.16 for an overview of the wording of the items). Factor loadings that are exceeding 0.35 are in bold type. Cronbach’s alpha values for each construct are reported above the rows for factor loadings in the table.
Table 6.21
Third VARIMAX-rotated Principal Axis Factoring Loadings of 7 Items and Cronbach’s Alpha Values of Two Factors (Japanese \( n = 252 \))

<table>
<thead>
<tr>
<th>Factors</th>
<th>F1*</th>
<th>F2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha values</td>
<td>.57</td>
<td>.43</td>
</tr>
<tr>
<td>Variables</td>
<td>Com**</td>
<td></td>
</tr>
<tr>
<td>PT3</td>
<td>.57</td>
<td>.04</td>
</tr>
<tr>
<td>ED3</td>
<td>.53</td>
<td>.10</td>
</tr>
<tr>
<td>PR4</td>
<td>.51</td>
<td>-.06</td>
</tr>
<tr>
<td>PT4</td>
<td>.39</td>
<td>.05</td>
</tr>
<tr>
<td>PT1</td>
<td>.08</td>
<td>.49</td>
</tr>
<tr>
<td>PR2</td>
<td>.17</td>
<td>.47</td>
</tr>
<tr>
<td>ED4</td>
<td>-.24</td>
<td>.42</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>1.11</td>
<td>.66</td>
</tr>
<tr>
<td>Contribution (%)</td>
<td>15.87</td>
<td>9.42</td>
</tr>
<tr>
<td>Cumulative contribution (%)</td>
<td>15.87</td>
<td>25.29</td>
</tr>
</tbody>
</table>

* = Factor loading > .35 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .583
- KMO = .636
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50

The Japanese patterns of factor loadings did not agree with the hypothesised constructs of readiness to accept government’s social marketing approaches and differed from the Australian constructs. However, close examination of the Japanese patterns with the wording of the variables appeared to suggest that PT3, ED3, PR4, and PT4 still explained readiness to accept government’s paternalistic social marketing approach, as hypothesised. Hence, the first factor was labelled as PT (readiness to accept government’s paternalistic social marketing approach). However, another construct with PT1, PT2, and ED4 did not appear to account for either readiness to accept government’s educational nor promotional social marketing approaches. Instead, they appeared to explain the Japanese social norms that supported the government’s responsibilities and capabilities to solve social issues and people’s responsibilities to follow the government’s order. Social norms do not always accord with individual beliefs and in fact, there were inconsistencies in opinions provided by the Japanese focus group participants. It was often seen that the same person had a negative opinion about the Japanese Government but a positive opinion about the government being involved in social marketing activities.
and its credibility. Considering the traditional Japanese culture that respects social harmony, it appeared reasonable that social norms were extracted more clearly than readiness to accept government’s educational and promotional approaches; therefore, F2 was labelled as SN (social norms).

**Readiness to accept government being involved in social marketing activities (8 items)**

Australian and Japanese scores from eight variables (GV1, GV2, GV3, GV4, GV5*, GV6, GV7, and GV8: see table 6.16 for wording of each item) were exploratory-factor-analysed to extract the most reliable combination of variables to measure readiness to accept government being involved in social marketing activities. That is, EFA here was interested in one dimension of readiness to accept government being involved in social marketing activities. Single factor does not allow rotation; therefore, factor rotation was not used in EFA here. The Australian results are reported first, and then the Japanese results next.

**Australian readiness to accept government being involved in social marketing activities**

Table 6.22 provides the statistics for the assumption tests, the number of factors, and the factor loadings yielded by the initial PAF analysis. Factor loadings that exceeded 0.37 are in bold type. As seen in the table, GV5* and GV6 had no significant factor loading and the sampling adequacy value for the latter was below 0.5. In addition, the first factor appeared to explain the readiness of interest. Therefore, elimination of GV5* and GV6 from the next analysis seemed reasonable and the second PAF analysis was performed on Australian scores from other six variables.
The second PAF analysis extracted two factors and the Australian scores from GV1, GV2, GV4, GV7, and GV8 yielded significant factor loadings; however, GV3 had no significant factor loading toward either of the factors (see table 6B.3 of appendix 6B for the results). Accordingly, GV3 was eliminated and the third PAF analysis was performed on Australian scores from other five variables.

In the third PAF analysis, the five variables (GV1, GV2, GV4, GV7, and GV8) had only one underlying construct (see table 6B.4 of appendix 6B for the results), which is the goal with EFA. However, GV2 did not yield significant factor loading; therefore, the fourth PAF analysis was performed on Australian scores from GV1, GV4, GV7, and GV8, eliminating GV2 from the analysis.

Like the third PAF analysis, in the fourth PAF analysis, the four variables (GV1, GV4, GV7, and GV8) had one underlying construct (see table 6B.5 of appendix 6B for the results); however, this time the factor loading for GV1 decreased to 0.36. Accordingly,
another PAF analysis was performed on Australian scores from GV4, GV7, and GV8, eliminating GV1 from the analysis.

Table 6.23 provides the outcomes final (fourth) PAF analysis. Factor loadings that exceeded 0.37 are in bold type. Cronbach’s alpha value for a construct is reported above the rows for factor loadings in the table.

Table 6.23
Fourth Principal Axis Factoring Loadings of 3 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha value</td>
<td>.59</td>
</tr>
<tr>
<td>Variables</td>
<td></td>
</tr>
<tr>
<td>GV8</td>
<td>.70</td>
</tr>
<tr>
<td>GV7</td>
<td>.61</td>
</tr>
<tr>
<td>GV4</td>
<td>.43</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>1.04</td>
</tr>
<tr>
<td>Contribution (%)</td>
<td>34.78</td>
</tr>
<tr>
<td>Cumulative contribution (%)</td>
<td>34.78</td>
</tr>
</tbody>
</table>

Note. * = Factor loading >.37 is in bold. ** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .727
- KMO = .613
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50

As seen in the table, all of the three variables yielded significant factor loadings and were unidimensional. Therefore, the solution from the fourth PAF analysis was accepted and Cronbach’s alpha value was computed 0.59, using scores from the three variables. Through the PAFs, Australian concept of readiness to accept government involvement in social marketing activities was operationalised as measured by GV4, GV7, and GV8.

Japanese readiness to accept government being involved in social marketing activities

Table 6.24 provides the statistics for the assumption tests, the number of factors, and the factor loadings yielded by the initial PAF analysis. Factor loadings that exceeded 0.35 are in bold type. As seen in the table, GV5* and GV6 had no significant factor loading towards any of the extracted factors. Therefore, elimination of GV5* and GV6 from the
next analysis seemed reasonable and the second PAF analysis was performed on Japanese scores from other six variables.

Table 6.24
First Principal Axis Factoring Loadings of 8 Items (Japanese n = 252)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1**</th>
<th>F2**</th>
<th>F3**</th>
<th>Com***</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV8</td>
<td>.62</td>
<td>-.12</td>
<td>.32</td>
<td>.50</td>
</tr>
<tr>
<td>GV7</td>
<td>.47</td>
<td>-.06</td>
<td>-.04</td>
<td>.23</td>
</tr>
<tr>
<td>GV4</td>
<td>.46</td>
<td>.17</td>
<td>-.42</td>
<td>.41</td>
</tr>
<tr>
<td>GV1</td>
<td>.41</td>
<td>-.03</td>
<td>.14</td>
<td>.19</td>
</tr>
<tr>
<td>GV6</td>
<td>-.18</td>
<td>.02</td>
<td>.14</td>
<td>.05</td>
</tr>
<tr>
<td>GV3</td>
<td>.10</td>
<td>.68</td>
<td>.14</td>
<td>.50</td>
</tr>
<tr>
<td>GV2</td>
<td>-.03</td>
<td>.36</td>
<td>-.02</td>
<td>.13</td>
</tr>
<tr>
<td>GV5*</td>
<td>.20</td>
<td>-.08</td>
<td>-.20</td>
<td>.09</td>
</tr>
</tbody>
</table>

Eigenvalues 1.07 .64 .38
Contribution (%) 13.32 8.05 4.75
Cumulative contribution (%) 13.32 21.37 26.13

Note. * = reverse item, ** = Factor loading >.37 is in bold, *** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .624
- KMO = .550
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50, except for GV3 (.47)

As shown in table 6.25, the second PAF analysis extracted two factors and yielded significant loadings for all of the variables, except for GV4, towards either of the factors. Comparing the wording of variables for the first factor with those for the second factor, the first factor appeared more consistent with the readiness of interest than the second factor. Accordingly, the fourth PAF analysis was performed on Japanese scores from GV1, GV7, and GV8.
Table 6.25
Second Principal Axis Factoring Loadings of 6 Items (Japanese \( n = 252 \))

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F1*</td>
</tr>
<tr>
<td>GV8</td>
<td>.57</td>
</tr>
<tr>
<td>GV7</td>
<td>.50</td>
</tr>
<tr>
<td>GV1</td>
<td>.47</td>
</tr>
<tr>
<td>GV4</td>
<td>.33</td>
</tr>
<tr>
<td>GV3</td>
<td>.10</td>
</tr>
<tr>
<td>GV2</td>
<td>-.06</td>
</tr>
</tbody>
</table>

|       |         |         |       |
|-------|---------|---------|
| Eigenvalues | .91     | .54     |       |
| Contribution (%) | 15.22   | 8.94    |       |
| Cumulative contribution (%) | 15.22   | 24.16   |       |

Note. * = Factor loading >.35 is in bold. ** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .691
- KMO = .570
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50, except for GV3 (.47)

Table 6.26 provides the statistics for the assumption tests, the number of factors, and the factor loadings yielded by the final (third) PAF analysis. Factor loadings that exceeded 0.35 are in bold type. Cronbach’s alpha value for the construct is reported above the rows for factor loadings in the table.

As shown in the table, all of the three variables yielded significant loadings and only one underlying factor. Therefore, the solution from the third PFA analysis was accepted and Cronbach’s alpha value was computed, using scores from the three variables. The value was 0.51. Through the PAFs, Japanese concept of readiness to accept government being involved in social marketing activities was operationalised as measured by GV1, GV7, and GV8.
Table 6.26
Third Principal Axis Factoring Loadings of 4 Items (Japanese $n = 252$)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s alpha value</th>
<th>Variables</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1*</td>
<td>.51</td>
<td>GV8</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GV1</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GV7</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.89</td>
<td>Eigenvalues</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>30.00</td>
<td>Contribution (%)</td>
<td>30.00</td>
</tr>
</tbody>
</table>

*Note. * = Factor loading > .35 is in bold. ** = Communalties,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .816
- KMO = .582
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50

Values related to the freedom of the individual (6 items)

Australian and Japanese scores from six items (VA1, VA2*, VA3*, VA4*, VA5*, and VA6: * indicates reversed items and see table 6.16 for wording of each item) were exploratory-factor-analysed to extract the most reliable combination of variables to measure values related to the freedom of the individual. Single factor does not allow rotation and hence it was not used.

Australian values related to the freedom of the individual

Table 6.27 provides the statistics for the assumption tests, the number of factors, and the factor loadings yielded by the initial PAF analysis. Factor loadings that exceeded 0.37 are in bold type. As seen in the table, VA1 and VA6 had no significant factor loading. All of the four reversed variables significantly depended on the first factor and VA1 and VA6, which are not reversed variables, did not yield significant factor loadings. Thus the first factor with the four reversed variables appeared to explain the values of interest logically. Therefore, the second analysis focused on the first factor and was performed on Australian scores from VA2*, VA3*, VA4* and VA5*.  

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Table 6.27  
First Principal Axis Factoring Loadings of 6 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA4*</td>
<td>.61</td>
<td>-.02</td>
<td>.37</td>
</tr>
<tr>
<td>VA2*</td>
<td>.57</td>
<td>.19</td>
<td>.36</td>
</tr>
<tr>
<td>VA3*</td>
<td>.54</td>
<td>.31</td>
<td>.39</td>
</tr>
<tr>
<td>VA5*</td>
<td>.54</td>
<td>-.41</td>
<td>.46</td>
</tr>
<tr>
<td>VA6</td>
<td>.01</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>VA1</td>
<td>-.21</td>
<td>.23</td>
<td>.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalues</th>
<th>Contribution (%)</th>
<th>Cumulative contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.32</td>
<td>22.00</td>
<td>22.00</td>
</tr>
<tr>
<td></td>
<td>.36</td>
<td>5.94</td>
<td>27.94</td>
</tr>
</tbody>
</table>

Note. * = reverse item. ** = Factor loading >.37 is in bold. *** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .598
- KMO = .682
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50

Table 6.28 provides the outcomes of the final (second) PAF analysis. Factor loadings that exceeded 0.37 are in bold type. Cronbach’s alpha value for the construct is reported above the rows for factor loadings in the table.

As seen in the table, all of the four variables yielded significant factor loadings and were unidimensional. Therefore, the solution from the second PFA analysis was accepted and Cronbach’s alpha value was computed, using scores from the four variables. The value was 0.61. Through the PAFs, Australian concept of values related to the freedom of the individual was operationalised as measured by VA2*, VA3*, VA4*, and VA5*.
Table 6.28
Second Principal Axis Factoring Loadings of 4 Items (Australians n = 231)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s alpha value</th>
<th>Variables</th>
<th>Com****</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1**</td>
<td>.61</td>
<td>VA4*</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VA2*</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VA3*</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VA5*</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eigenvalues</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contribution (%)</td>
<td>30.10</td>
</tr>
</tbody>
</table>

Note. * = reverse item. ** = Factor loading >.37 is in bold. *** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .636
- KMO = .679
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50

Japanese values related to the freedom of the individual

Table 6.29 provides the statistics of the assumption tests, the number of factors, and the factor loadings yielded by the initial PAF analysis. Factor loadings that exceeded 0.35 are in bold type. As seen in the table, VA1, VA3, and VA6 had no significant factor loading. Although the analysis extracted two factors, the loading pattern of the second factor could not provide any logical explanation but the first factor with the three reversed variables appeared to explain the values of interest reasonably. Therefore, the second analysis focused on the first factor and was performed on Japanese scores from VA2*, VA4* and VA5*. 
Table 6.29
First Principal Axis Factoring Loadings of 6 Items (Japanese \( n = 252 \))

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1**</th>
<th>F2**</th>
<th>Com***</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA5*</td>
<td>.66</td>
<td>-.39</td>
<td>.59</td>
</tr>
<tr>
<td>VA4*</td>
<td>.59</td>
<td>.07</td>
<td>.35</td>
</tr>
<tr>
<td>VA2*</td>
<td>.46</td>
<td>.39</td>
<td>.36</td>
</tr>
<tr>
<td>VA3*</td>
<td>.29</td>
<td>-.03</td>
<td>.09</td>
</tr>
<tr>
<td>VA1</td>
<td>.10</td>
<td>.29</td>
<td>.35</td>
</tr>
<tr>
<td>VA6</td>
<td>.13</td>
<td>.15</td>
<td>.04</td>
</tr>
</tbody>
</table>

Eigenvalues  
Contribution (%)  
Cumulative contribution (%)  

Note. * = reverse item. ** = Factor loading > .35 is in bold. *** = Communalities.

Tests of assumptions of EFA:
- Determinant of correlation matrix = .672
- KMO = .565
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50

The second PAF retained one factor; however, the factor loading of VA2* decreased to non-significant value; 0.33. This could be understood as VA4* and VA5* talked about ‘do something that I want to’; however, VA2* was about ‘don’t do something that I don’t want to’ (see table 6.16). Considering the fact that concepts of the individual freedom in English was characterised by the latter ‘don’t do’ (Wierzbicka, 1997), it appeared reasonable that VA2* did not yield significant factor loading for the Japanese values. Therefore, the third PAF analysis was performed, eliminating VA2* from the analysis.

Table 6.30 provides the outcomes from the final (second) PAF analysis. Factor loadings that exceeded 0.35 are in bold type. Cronbach’s alpha value for the construct is reported above the rows for factor loadings in the table.
Table 6.30
Second Principal Axis Factoring Loadings of 2Items (Japanese n = 252)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s alpha value</th>
<th>Variables</th>
<th>Com***</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1**</td>
<td>.56</td>
<td>VA4*</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VA5*</td>
<td>.62</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>.77</td>
<td>Contribution (%)</td>
<td>38.52</td>
</tr>
</tbody>
</table>

Tests of assumptions of EFA:
- Determinant of correlation matrix = .851
- KMO = .500
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50

As seen in the table, both of the two variables yielded significant factor loadings and were retained unidimensional. Therefore, the solution from the second PFA analysis was accepted and Cronbach’s alpha value was computed, using scores from the four variables. The value was 0.56. Through the PAFs, Japanese concept of values related to the freedom of the individual was operationalised as measured by VA4* and VA5*.

Summary of measurement model development

The results of EFAs suggested:

- The hypothesised constructs, for measurement models of readiness to accept government’s social marketing approaches, readiness to accept government’s involvement in social marketing activities, and values relating to the freedom of the individual, appeared different to the observed data for both Australian and Japanese university students.
- Although both Australian and Japanese observed data yielded a factor about readiness to accept government’s paternalistic social marketing approach, no other common factor was yielded by the EFAs. This suggests that equivalence of the measurement models, for Australian and Japanese readiness to accept government’s social marketing approaches, was not supported.
• Although Australian and Japanese readiness to accept government’s involvement in social marketing activities shared common variables (GV7 and GV8), their loading patterns were different. This suggests that equivalence, of the measurement models for Australian and Japanese readiness to accept government’s involvement in social marketing activities, was not supported.

• Although Australian and Japanese values related to the freedom of the individual shared common variables (VA4* and VA5*), their loading patterns were different. This suggests that equivalence, of the measurement models for Australian and Japanese values related to the freedom of the individual, was not supported.

Non-equivalence of measurement models and remedy

The summaries in the previous section suggest that an assumption of measurement model equivalence was violated. This meant that MG-CFA and MG-MACS, where means of latent factors can be compared between different groups, were impossible to be performed on Australian and Japanese scores. Hence, the present study decided that the sequential main analyses focused on only CFA and the structural model test on Australian and Japanese scores separately.

However, MG-CFA and MG-MACS were selected to test H1a, H1b, H2a, H3a, and H4a. Therefore, instead of MG-CFA and MG-MACS, the present study used the results from Q11-1, Q11-2, Q11-3, Q11-4 (see details of these single-item measurements for readiness to accept government being involved in social marketing activities and readiness to accept government’s educational, promotional, and paternalistic social marketing approaches for section 6.7.1b of this chapter) and from Q13-4 and Q13-5 (see details of these single-item measurements for importance of the individual freedom for society and for an individual for section 6.7.1e of this chapter) to test the five sub-hypotheses.
6.7.2c Structural equation modeling

In this section, Australian and Japanese results of CFAs and structural model tests are reported individually. However, before reporting these results, analysis information common to all of the analyses is provided.

SEM analysis information for this study

SEM program and data used

All of the CFAs and structural model tests were analysed by AMOS (Analysis MOment Structures) Graphics 17.0 using raw data stored in SPSS Statistics 17.0 (see section 6.6.2 in this chapter for the rationale for program selection). In these tests, all the models were diagrammed as: latent variables are represented by ovals and observed variables by squares, and relationships between them are represented by one-headed arrows while two-headed arrows indicate covariance between latent variables. Each observed variable has an error in measurement. Variances of latent variables and path coefficients from errors to observed variables were fixed as equal 1.

Strictly speaking, Likert-scales that were used for this study are categorised into an ordinal scale; however, as suggested by Bentler and Chou (1987) Likert-scales using five-points or over could be treated as an interval scale as long as the researcher uses the data carefully. Therefore, the data of this study that was observed by 5-point Likert-scales was regarded as interval data.

Method of parameter estimation

Parameters of the models were estimated, using the maximum likelihood estimation (MLE) method which produces optimum parameter estimates and is widely used (Raykov, Tomer, & Nesselroade, 1991). In principle, MLE assumes multivariate normal distribution of the observed variables (Byrne, 2000). However, alternative methods for non-normal data; an asymptotically distribution-free (ADF) method, for example, are often not practical as they require a large sample (exceeding 1,000) (The University of Texas at Austin, 2009) and theoretically speaking, estimates should not change markedly with different estimation methods (Kano & Miura, 2003). Therefore, although this study may have involved multivariate non-normal distribution of the observed variables, the MLE method was selected. In addition, the sample size of this study was very close to the
recommended size for stability of MLE estimates; 200 (Hair et al., 2006), which also rationalised the selection of the MLE method.

**Multivariate normality test**

Multivariate normality of the variables was tested in each analysis of this study, based on Mardia’s coefficient values (Mardia, Kent, & Bibby, 1979) which were calculated by AMOS 17.0, using the raw data. If the coefficient value exceeds 1.96 multivariate non-normal distribution of the observed variables was assumed and exceeding 10 indicates severe non-normality (Mardia et al., 1979).

**Bootstrapping**

In order to handle the multivariate non-normal distribution, a bootstrap technique (Efron, 1979) was used to provide information about the stability of parameter estimates and more accurate results (Byrne, 2000). It was also chosen because it was available on AMOS 17.0. Bootstrapping is “a resampling procedure by which the original sample is considered to represent the population” (Byrne, 2000, p. 268) to obtain required sample statistics from the subsamples (Blunch, 2008). In this study, bootstrapping was performed on 250 samples, using the ML estimator in AMOS 17.0. The number of the bootstrapping samples was 250 as, beyond this, samples yield similar results (Nevitt & Hancock, 2001). At the same time, the researcher selected bias-corrected confidence intervals for each of the bootstrap estimates at the 90% level.

**Model fit indices**

Goodness-of-fit (Goff & Goddard) indices have been widely accepted as the basis for assessing model fit in the SEM, when used without thinking (Marsh et al., 2004). However, these authors suggested that assessment of the model fit, based on the GOF rules alone, poses the risk of rejecting an acceptable model. Based on their suggestions, Hair et al (2006) provided guidelines for assessing acceptable and unacceptable model fits. Table 6.31 provides the fit indices used in this study (see Marsh et al., 2004, p. 753 for full guidelines for using fit indices in different situations). The indices include a GOF, an absolute fit measure (CFI), and a fit measure based on the non-cremental chi-square distribution (RMSEA); cutoff values were also varied, depending on the situation.
Table 6.31
Fit Indices Used for the Study (extracted from Marsh et al., 2004, p. 753, Table 10-2)

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Number of variables (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>m≤12</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>Insignificant p-values expected</td>
</tr>
<tr>
<td>CFI</td>
<td>.97 or better</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Values &lt;.08 with CFI = .97 or higher</td>
</tr>
</tbody>
</table>

Note. These indices are in a situation with the number of samples less than 250

**Australian models**

**Measurement models**

The hypothesised measurement model for Australian readiness to accept government’s social marketing approaches was tested by CFA with $n = 231$, using an AMOS 17.0 software program. Figure 6.2 depicts the model; latent variables are represented by ovals and observed variables by squares, and relationships between them are represented by one-headed arrows while two-headed arrows indicate covariance between latent variables. Each observed variable has an error in measurement. Variances of latent variables and path coefficients from errors to observed variables were fixed as equal 1.

The hypothesised Australian CFA model indicates that the first two observed variables (PR1 and PR2) measure the latent variable ED (readiness to accept government’s educational social marketing approach), the third, fourth, and fifth observed variables (ED3, PR4, and ED2) measure the latent variable PR (readiness to accept government’s promotional social marketing approach), and the last five variables (ED4, PT2, PT4, ED1, and PT3) measure the latent variable PT (readiness to accept government’s paternalistic social marketing approach). ED, PR, and PT are correlated.
Compared to the recommended indices of model acceptance (see table 6.31), the initial CFA results suggested a less than acceptable fit:

Minimum Fit Function Chi-Square = 49.101 (p = 0.027)
Degrees of Freedom = 32
Goodness of Fit Index (GFI) = 0.958
Comparative Fit Index (CFI) = 0.946
Root-mean-square Error of Approximation (RMSEA) = 0.048

Consequently, the standardised regression weights (i.e. standardised factor loadings and ‘the standardised regression weights’ means the standardised factor loadings in the rest of this chapter) were examined to search for clues to improve the model. Variables with regression weights below 0.5 would be candidates for elimination as such values in CFA may reflect a non-reliable item (Hair et al., 2006). ED2, ED4, PT2, and ED1 had standardised regression weights below 0.5 (0.456, 0.350, 0.441, and 0.451 respectively) and ED4 had the lowest weight. Therefore, ED4 was the most likely candidate for
elimination. This was also logical as ED4 asked about credibility of the government’s information as did ED1 under a latent factor of PT. Thus, the elimination of ED4 appeared justifiable and this still allowed the researcher to maintain a hypothesised three-factor model.

The CFA results of the modified model indicated an acceptable level of fit (see table 6.33 for the indices of an acceptable model):

- Minimum Fit Function Chi-Square = 32.994 (p = 0.104)
- Degrees of Freedom = 24
- Goodness of Fit Index (GFI) = 0.970
- Comparative Fit Index (CFI) = 0.969
- Root-mean-square Error of Approximation (RMSEA) = 0.040

To test the model improvement statistically, a chi-square difference statistic ($\Delta \chi^2$) between the original hypothesised model and the modified model was calculated, using the following equation:

$$\Delta \chi^2_{\Delta df} = \Delta \chi^2_{\Delta df(hypothesised\ model)} - \Delta \chi^2_{\Delta df(modified\ model)}$$
$$\Delta df = df (hypothesised\ model) - df (modified\ model)$$

The result was:

$$\chi^2_{8}(0.05) = 15.507 < (49.101 - 32.994 = 16.107)$$
$$8 = 42-34$$

The chi-square difference value of 16.107 was better than the value of 15.507 with eight degrees of freedom difference, which indicated that the modified model had been significantly improved (p < 0.05) after deleting ED4. Accordingly, the modified model was finalised.

Figure 6.3 depicts the final Australian CFA model with standardised regression weights for each path, covariances between the latent variables, and coefficients of determination $R^2$ of the observed variables. All of the estimates were significant in the final model. The
model only differed from the original model in that the latent variable PT had four indicators (PT2, PT4, ED1, and PT3), instead of the original five.

Figure 6.3 Final Australian CFA model with parameter estimates

Note. Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Covariances between the latent variables are represented by two-headed arrows. Each observed variable has an error in measurement.

All estimates were significant (p < 0.05).

Although parameter estimates are shown in Figure 6.3, their accuracy was questionable because of the non-normal multivariate distribution of the model. The AMOS normality test yielded a multivariate kurtosis value of 15.265 from the values for the observed variables in the final CFA model. The multivariate kurtosis value was Mardia’s coefficient values and the value of 15.265 exceeded 10 which indicated severe non-normality (The University of Texas at Austin, 2009). Hence, bootstrap parameter estimates were computed for each estimate in the model with 250 bootstrap samples.
Table 6.32 lists maximum likelihood parameter estimates (standardised regression weights, covariances, and coefficient determination $R^2$ values), bootstrap parameter estimates with bias-corrected confidence intervals (90%), and p-values for the final model along with the measurement model fit indices. As seen in the table, some of the maximum likelihood-based estimates were the same as the bootstrap-based estimates and the bias-corrected confidence interval rejected that the parameter estimate was zero (i.e. all of the p-value were significant, $p < 0.05$). Hence, the final Australian CFA model was accepted.

In addition to model fit, face, convergent, and discriminant validities of the final Australian CFA model were examined to assess construct validity of the model. For assessing face validity, consistency of the content of each item with the definition of the construct, identified through the EFAs, was carefully examined by the researcher and her supervisors and colleagues. Inconsistency of the contents was not found and face validity of each construct was assured.

Convergent validity of the measurement model was examined, based on standardised regression weights. Generally, it has been considered that the weights should be 0.5 or higher (Hair et al., 2006). However, considering that the present study is relatively novel, it seemed justifiable to accept variables with weights less than 0.5 if face validity and the model fit indices yielded from the model met the acceptance criteria.

Discriminant validity of the Australian model was assessed by fixing covariance among the three latent factors as equal 1, which specified the model as a single factor model. The fit statistics from this single factor model were: $\chi^2$ was 124.029 with 27 degrees of freedom ($p < 0.001$). The model CFI was 0.664, with RMSEA of 0.125. All of these measures varied from the criteria of good fit, while the three factor model showed good fit. In addition, the statistic of $\chi^2$ difference between the single factor and three factor models was: $\chi^2 = 91.035 >12.8381$ at $p = 0.005$ level. These results supported the significant superiority of the three factor model over the single factor model: that is, discriminant validity of the Australian model was assured.
From these results, construct validity of the Australian final CFA model for readiness to accept government’s social marketing approaches appeared to be confirmed.

Table 6.32
Maximum Likelihood and Bootstrap Parameter Estimates for the Final Australian CFA Model (n = 231)

<table>
<thead>
<tr>
<th></th>
<th>Maximum Likelihood Estimates</th>
<th>Bootstrap Estimates</th>
<th>Bias*</th>
<th>Lower**</th>
<th>Upper**</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR1 ← ED</td>
<td>.721</td>
<td>.722</td>
<td>.001</td>
<td>.577</td>
<td>.855</td>
<td>.011</td>
</tr>
<tr>
<td>PR2 ← ED</td>
<td>.618</td>
<td>.607</td>
<td>-.011</td>
<td>.466</td>
<td>.734</td>
<td>.008</td>
</tr>
<tr>
<td>ED3 ← PR</td>
<td>.757</td>
<td>.756</td>
<td>-.001</td>
<td>.649</td>
<td>.872</td>
<td>.007</td>
</tr>
<tr>
<td>PR4 ← PR</td>
<td>.577</td>
<td>.571</td>
<td>-.006</td>
<td>.461</td>
<td>.676</td>
<td>.006</td>
</tr>
<tr>
<td>ED2 ← PR</td>
<td>.449</td>
<td>.456</td>
<td>.007</td>
<td>.320</td>
<td>.557</td>
<td>.015</td>
</tr>
<tr>
<td>PT2 ← PT</td>
<td>.412</td>
<td>.411</td>
<td>-.001</td>
<td>.279</td>
<td>.547</td>
<td>.006</td>
</tr>
<tr>
<td>PT4 ← PT</td>
<td>.538</td>
<td>.540</td>
<td>.002</td>
<td>.368</td>
<td>.649</td>
<td>.013</td>
</tr>
<tr>
<td>ED1 ← PT</td>
<td>.436</td>
<td>.440</td>
<td>.004</td>
<td>.280</td>
<td>.548</td>
<td>.013</td>
</tr>
<tr>
<td>PT3 ← PT</td>
<td>.583</td>
<td>.583</td>
<td>.001</td>
<td>.450</td>
<td>.693</td>
<td>.009</td>
</tr>
<tr>
<td>ED ← PR</td>
<td>.594</td>
<td>.594</td>
<td>.000</td>
<td>.445</td>
<td>.746</td>
<td>.007</td>
</tr>
<tr>
<td>ED ← PT</td>
<td>.582</td>
<td>.586</td>
<td>.004</td>
<td>.369</td>
<td>.715</td>
<td>.017</td>
</tr>
<tr>
<td>PR ← PT</td>
<td>.656</td>
<td>.669</td>
<td>.013</td>
<td>.426</td>
<td>.799</td>
<td>.025</td>
</tr>
<tr>
<td>$R^2$ (PR1)***</td>
<td>.520</td>
<td>.528</td>
<td>.008</td>
<td>.333</td>
<td>.731</td>
<td>.011</td>
</tr>
<tr>
<td>$R^2$ (PR2)***</td>
<td>.382</td>
<td>.375</td>
<td>-.007</td>
<td>.217</td>
<td>.539</td>
<td>.008</td>
</tr>
<tr>
<td>$R^2$ (ED3)***</td>
<td>.573</td>
<td>.577</td>
<td>.004</td>
<td>.421</td>
<td>.761</td>
<td>.007</td>
</tr>
<tr>
<td>$R^2$ (PR4)***</td>
<td>.333</td>
<td>.331</td>
<td>-.002</td>
<td>.212</td>
<td>.457</td>
<td>.006</td>
</tr>
<tr>
<td>$R^2$ (ED2)***</td>
<td>.202</td>
<td>.213</td>
<td>.011</td>
<td>.102</td>
<td>.311</td>
<td>.015</td>
</tr>
<tr>
<td>$R^2$ (PT2)***</td>
<td>.169</td>
<td>.175</td>
<td>.006</td>
<td>.078</td>
<td>.300</td>
<td>.006</td>
</tr>
<tr>
<td>$R^2$ (PT4)***</td>
<td>.289</td>
<td>.297</td>
<td>.008</td>
<td>.135</td>
<td>.421</td>
<td>.013</td>
</tr>
<tr>
<td>$R^2$ (ED1)***</td>
<td>.190</td>
<td>.199</td>
<td>.009</td>
<td>.078</td>
<td>.300</td>
<td>.013</td>
</tr>
<tr>
<td>$R^2$ (PT3)***</td>
<td>.339</td>
<td>.345</td>
<td>.006</td>
<td>.208</td>
<td>.480</td>
<td>.009</td>
</tr>
</tbody>
</table>

Chi-square (df; p) 32.994 (24; .104)
GFI .970
CFI .969
RMSEA .040

Notes. All of the maximum likelihood-based estimates were significantly different from zero (p < 0.05).
* The bias column indicates the difference between the maximum likelihood-based estimate and the bootstrap-based estimate.
** Bias-corrected confidence intervals at 90%
*** $R^2$ indicates the coefficient of determination.

CFA was not performed on the other two measurement models; readiness to accept government’s involvement in social marketing activities and values related to the
freedom of the individual, because of an identification issue. Each of the hypothesised models had three indicators in which the model was just identified. This means that the number of degrees of freedom is zero and in this case, CFA estimates become exactly the same as the saturated model. That is, CFA cannot estimate parameters for the hypothesised model on its own. However, this did not necessarily suggest that the two hypothesised measurement models were invalid. They were integrated into the hypothesised structural model, so that they gained the spare degree of freedom from other measurement models and the overall model was identified (Schumacker & Lomax, 1996). The results of the overall model are reported below.

**Structural models**

The hypothesised Australian structural model was tested by structural model test with $n = 231$, using an AMOS 17.0 software program. Figure 6.4 depicts the hypothesised Australian structural model along with parameter estimates (standardised regression weights and coefficients of determinacy $R^2$) yielded through the initial test. All of the estimates, except for the estimate from VA to GV ($p = 0.145$), were significant ($p < 0.05$).

The model indicates that the latent variable VA (values related to the freedom of the individual) affects the latent variable GV (readiness to accept government involvement in social marketing activities) directly, and VA influences the latent variables ED (readiness to accept government’s educational social marketing approach), PR (readiness to accept government’s promotional social marketing approach), and PT (readiness to accept government’s paternalistic social marketing approach) indirectly, through mediation by GV. A total of 24 paths of regression weights and VA variance were fixed as equal 1.

The results suggested a less than acceptable fit (see table 6.31 for the recommended indices for model acceptance):

- Minimum Fit Function Chi-Square = 199.444 ($p = 0.000$)
- Degrees of Freedom = 100
- Goodness of Fit Index (GFI) = 0.903
- Comparative Fit Index (CFI) = 0.838
- Root-mean-square Error of Approximation (RMSEA) = 0.066
To search for clues to improve the model, examination of the modification indices provided by AMOS 17.0 program suggested several paths that could be added. However, none of the paths could be theoretically justified. Hence, Wald statistics (‘C.R.’ in the AMOS output) were checked next as a Wald statistic less than 1.96 indicates non-significant difference from zero, suggesting a path that could be eliminated (Schumacker & Lomax, 1996); the path from VA to GV fit this criterion.

The AMOS normality test yielded multivariate kurtosis value of 32.485 from the values for the observed variable in the hypothesised Australian structural model. The multivariate kurtosis value exceeded 10, which indicated severe non-normality (The University of Texas at Austin, 2009). Hence, bootstrap parameter estimates were computed for each estimate in the model with 250 bootstrap samples.

Table 6.33 lists maximum likelihood parameter estimates (standardised regression weights and coefficient determination $R^2$ values), bootstrap parameter estimates with bias-corrected confidence intervals (90%), and p-values for the hypothesised model along with the measurement model fit indices. As seen in the table, the bootstrap-based estimate from VA to GV included zero and its p-value was 0.390. That is, the path from VA to GV was again considered inappropriate.
**Figure 6.4** Hypothesised Australian structural model with parameter estimates

*Note.* Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Each observed variable has an error in measurement.

All the estimates were significant ($p < 0.05$), except for the estimate for the path from VA to GV.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Maximum Likelihood Estimates</th>
<th>Bootstrap Estimates</th>
<th>Mean Estimates</th>
<th>Bias*</th>
<th>Lower**</th>
<th>Upper**</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV ← VA</td>
<td>-.145</td>
<td>-.149</td>
<td>-.004</td>
<td>-.300</td>
<td>.109</td>
<td>.390</td>
<td></td>
</tr>
<tr>
<td>ED ← GV</td>
<td>.570</td>
<td>.568</td>
<td>-.002</td>
<td>.402</td>
<td>.733</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>PR ← GV</td>
<td>.939</td>
<td>.942</td>
<td>.003</td>
<td>.804</td>
<td>1.052</td>
<td>.013</td>
<td></td>
</tr>
<tr>
<td>PT ← GV</td>
<td>.671</td>
<td>.684</td>
<td>.013</td>
<td>.481</td>
<td>.785</td>
<td>.030</td>
<td></td>
</tr>
<tr>
<td>VA2 ← VA</td>
<td>.561</td>
<td>.557</td>
<td>-.004</td>
<td>.404</td>
<td>.714</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>VA3 ← VA</td>
<td>.507</td>
<td>.507</td>
<td>.000</td>
<td>.329</td>
<td>.620</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td>VA4 ← VA</td>
<td>.660</td>
<td>.660</td>
<td>.000</td>
<td>.465</td>
<td>.818</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>VA5 ← VA</td>
<td>.443</td>
<td>.432</td>
<td>-.009</td>
<td>.281</td>
<td>.621</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>GV4 ← GV</td>
<td>.368</td>
<td>.367</td>
<td>-.001</td>
<td>.221</td>
<td>.486</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>GV7 ← GV</td>
<td>.552</td>
<td>.543</td>
<td>-.009</td>
<td>.433</td>
<td>.670</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>GV8 ← GV</td>
<td>.670</td>
<td>.662</td>
<td>-.008</td>
<td>.673</td>
<td>.767</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>PR1 ← ED</td>
<td>.740</td>
<td>.743</td>
<td>-.003</td>
<td>.556</td>
<td>.917</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>PR2 ← ED</td>
<td>.602</td>
<td>.597</td>
<td>-.005</td>
<td>.424</td>
<td>.753</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>ED3 ← PR</td>
<td>.713</td>
<td>.712</td>
<td>-.001</td>
<td>.586</td>
<td>.807</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>PR4 ← PR</td>
<td>.603</td>
<td>.597</td>
<td>-.005</td>
<td>.509</td>
<td>.694</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>ED2 ← PR</td>
<td>.474</td>
<td>.476</td>
<td>.002</td>
<td>.348</td>
<td>.558</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>PT2 ← PT</td>
<td>.370</td>
<td>.369</td>
<td>-.001</td>
<td>.251</td>
<td>.528</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>PT4 ← PT</td>
<td>.584</td>
<td>.586</td>
<td>.002</td>
<td>.447</td>
<td>.696</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td>ED1 ← PT</td>
<td>.367</td>
<td>.368</td>
<td>.001</td>
<td>.229</td>
<td>.487</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>PT3 ← PT</td>
<td>.612</td>
<td>.616</td>
<td>.003</td>
<td>.468</td>
<td>.708</td>
<td>.014</td>
<td></td>
</tr>
<tr>
<td>R^2 (GV)</td>
<td>.021</td>
<td>.036</td>
<td>.013</td>
<td>.000</td>
<td>.086</td>
<td>.023</td>
<td></td>
</tr>
<tr>
<td>R^2 (ED)</td>
<td>.325</td>
<td>.332</td>
<td>.007</td>
<td>.162</td>
<td>.537</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>R^2 (PR)</td>
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<td>.892</td>
<td>.010</td>
<td>.647</td>
<td>1.108</td>
<td>.013</td>
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<tr>
<td>R^2 (PT)</td>
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<td>.475</td>
<td>.025</td>
<td>.232</td>
<td>.616</td>
<td>.030</td>
<td></td>
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<tr>
<td>R^2 (VA2)</td>
<td>.315</td>
<td>.319</td>
<td>.004</td>
<td>.163</td>
<td>.509</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>R^2 (VA3)</td>
<td>.257</td>
<td>.265</td>
<td>.008</td>
<td>.108</td>
<td>.384</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td>R^2 (VA4)</td>
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<td>.446</td>
<td>.011</td>
<td>.216</td>
<td>.699</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>R^2 (VA5)</td>
<td>.196</td>
<td>.198</td>
<td>.002</td>
<td>.079</td>
<td>.386</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>R^2 (GV4)</td>
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<td>.141</td>
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<tr>
<td>R^2 (GV7)</td>
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<td>R^2 (PR1)</td>
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<td>.343</td>
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<td>R^2 (PT4)</td>
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<td>.012</td>
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<td>R^2 (ED1)</td>
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</tr>
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<td>R^2 (PT3)</td>
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<td>.009</td>
<td>.219</td>
<td>.501</td>
<td>.014</td>
<td></td>
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</tbody>
</table>
Chi-square (df; p)  199.444 (100; .000)
GFI  .903
CFI  .838
RMSEA  .066

Notes. All of the maximum likelihood-based estimates were significantly different from zero (p < 0.05), except for GV ← VA (p = .145).
* The bias column indicates the difference between the maximum likelihood-based estimate and the bootstrap-based estimate.
** Bias-corrected confidence intervals at 90%
*** $R^2$ indicates the coefficient of determination.

Although the overall hypothesised Australian structure model was rejected, the structural model of relationships among GV, ED, PR, and PT was analysed to test the hypothesis that GV influences ED, PR, and PT. The hypothesised model was tested with $n = 231$, using an AMOS 17.0 software program. Figure 6.5 depicts the hypothesised Australian structural model of GV, ED, PR, and PT along with parameter estimates (standardised regression weights and coefficients of determinacy $R^2$) yielded through the initial test. All of the estimates were significant (p < 0.05).

The model indicates that the latent variable GV (readiness to accept government involvement in social marketing activities) influences the latent variables ED (readiness to accept government’s educational social marketing approach), PR (readiness to accept government’s promotional social marketing approach), and PT (readiness to accept government’s paternalistic social marketing approach) directly. A total of 18 paths of regression weights and GV variance were fixed as equal 1.
The results suggested a less than acceptable fit (see table 6.31 for the recommended indices for model acceptance):

Minimum Fit Function Chi-Square = 115.584 (p = 0.000)
Degrees of Freedom = 51
Goodness of Fit Index (GFI) = 0.923
Comparative Fit Index (CFI) = 0.867
Root-mean-square Error of Approximation (RMSEA) = 0.074

As with the overall hypothesised structural model, reasonable suggestions for the model modification could not be found. Hence, it was concluded that the structural model of GV, ED, PR, and PT was rejected as well as the overall model.

Figure 6.5 Hypothesised Australian structural model of GV, ED, PR, and PT

Note. Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Each observed variable has an error in measurement.

All of the estimates were significant (p < 0.05).
The AMOS normality test yielded multivariate kurtosis value of 26.714 from the values for the observed variable in the hypothesised model. The multivariate kurtosis value exceeded 10, which indicated severe non-normality (The University of Texas at Austin, 2009). Hence, bootstrap parameter estimates were computed for each estimate in the model with 250 bootstrap samples.

Table 6.34 lists maximum likelihood parameter estimates (standardised regression weights and coefficient determination $R^2$ values), bootstrap parameter estimates with bias-corrected confidence intervals (90%), and p-values for the hypothesised model along with the measurement model fit indices. The entire bootstrap-based estimates did not include zero as well as the likelihood-based estimates.
Table 6.34
Maximum Likelihood and Bootstrap Parameter Estimates for the hypothesised Australian structural model with four latent variables (n = 231)

<table>
<thead>
<tr>
<th></th>
<th>Maximum Likelihood Estimates</th>
<th>Bootstrap Estimates</th>
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</thead>
<tbody>
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<td>Mean Estimates</td>
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<td>GV7 ← GV</td>
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<tr>
<td>GV8 ← GV</td>
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<tr>
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<td>PR2 ← ED</td>
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<tr>
<td>ED3 ← PR</td>
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<td>PR4 ← PR</td>
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<td>PT2 ← PT</td>
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<td>PT4 ← PT</td>
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<td>ED1 ← PT</td>
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<td>.368</td>
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<td>PT3 ← PT</td>
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<td>.613</td>
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<td>$R^2$(ED)**</td>
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<td>$R^2$(PR2)**</td>
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<td>.374</td>
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<td>$R^2$(ED3)**</td>
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<td>$R^2$(PR4)**</td>
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<td>$R^2$(PT2)**</td>
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<td>$R^2$(PT4)**</td>
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<td>$R^2$(ED1)**</td>
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</tr>
<tr>
<td>$R^2$(PT3)**</td>
<td>.373</td>
<td>.381</td>
</tr>
</tbody>
</table>

Chi-square (df; p) 115.584 (51; .000)
GFI .923
CFI .867
RMSEA .074

Notes. All of the maximum likelihood-based estimates were significantly different from zero (p < 0.05).
* The bias column indicates the difference between the maximum likelihood-based estimate and the bootstrap-based estimate.
** Bias-corrected confidence intervals at 90%
*** $R^2$ indicates the coefficient of determination.
To assess reliability of the results of the Australian SEM analyses, the results were compared with correlations among VA2*, VA3*, VA4*, VA5*, Q11-1 (single-item scale for readiness to accept government’s educational social marketing approach), Q11-2 (single-item scale for readiness to accept government’s promotional social marketing approach), Q11-3 (single-item scale for readiness to accept government’s paternalistic social marketing approach), and Q11-4 (single-item scale for readiness to accept government’s involvement in social marketing activities). See section 6.7.1b of this chapter for these four single-item scales.

There were significant negative relationships between VA5* and Q11-1 (education): $\tau = -0.222$, $p < 0.01$, and between VA5* and Q11-4 (involvement): $\tau = -0.166$, $p < 0.01$. In addition, there were significant positive relationships between Q11-4 (involvement) and Q11-1, Q11-2, Q11-3: $\tau = 0.151$, $p < 0.01$, $\tau = 0.326$, $p < 0.01$, and $\tau = 0.286$, $p < 0.01$, respectively. Although the structural model was not accepted, the pattern of these relationships resembled those of SEMs. They lend support to the view that the results of the SEMs were reliable.

**Japanese models**

**Measurement models**

The hypothesised measurement model for Japanese readiness to accept government’s social marketing approaches was tested by CFA with $n = 252$, using an AMOS 17.0 software program. Figure 6.6 depicts the model. The hypothesised Japanese CFA model indicates that the first three observed variables (PR2, PT1, and ED4) measure the latent variable SN (social norms) and the last four observed variables (PT3, PT4, ED3, and PR4) measure the latent variable PT (readiness to accept government’s paternalistic social marketing approach). SN and PT are correlated. Variances of latent variables and path coefficients from errors to observed variables were fixed as equal 1.
Compared to the recommended indices of model acceptance (see table 6.31), the initial CFA results suggested a less than acceptable fit:

Minimum Fit Function Chi-Square = 26.724 (p = 0.014)
Degrees of Freedom = 13
Goodness of Fit Index (GFI) = 0.972
Comparative Fit Index (CFI) = 0.880
Root-mean-square Error of Approximation (RMSEA) = 0.065

Consequently, the standardised regression weights were examined to search for clues to improve the model as variables with regression weights below 0.5 would be candidates for elimination (Hair et al., 2006). PT4, PR4, PR2, and ED4 had standardised regression weights below 0.5 (0.408, 0.483, 0.484, and 0.295 respectively) and ED4 had the lowest weight. Therefore, ED4 appeared the most likely candidate for elimination. The elimination of ED4 still retained a hypothesised two-factor model.

The CFA results of the modified model indicated an acceptable level of fit (see table 6.31 for the indices of an acceptable model):
Minimum Fit Function Chi-Square = 9.212 (p = 0.325)
Degrees of Freedom = 8
Goodness of Fit Index (GFI) = 0.988
Comparative Fit Index (CFI) = 0.987
Root-mean-square Error of Approximation (RMSEA) = 0.025

To test the model improvement statistically, a chi-square difference statistic ($\Delta \chi^2$) between the original hypothesised model and the modified model were calculated, using the following equation:

$$\Delta \chi^2_{df} = \Delta \chi^2_{df(hypothesised\ model)} - \Delta \chi^2_{df(modified\ model)}$$
$$\Delta df = df\ (hypothesised\ model) - df\ (modified\ model)$$

The result was:

$$\chi^2_5(0.005) = 16.750 < (26.724 - 9.212 = 17.512 )$$
$$5 = 13-8$$

The chi-square difference value of 117.512 was better than the value of 16.750 with five degrees of freedom, greater the modified model was significantly improved at the 0.005 level after deleting ED4. Accordingly, the modified model was finalised.

Figure 6.7 depicts the final Japanese CFA model with standardised regression weights for each path, covariances between the latent variables, and coefficients of determination $R^2$ of the observed variables. All of the estimates were significant in the final model. The model only differed from the original model in that a latent variable SN had two indicators (PR2 and PT1), instead of three.
Figure 6.7 Final Japanese CFA model with parameter estimates

Note. Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Covariances between the latent variables are represented by two-headed arrows. Each observed variable has an error in measurement. All estimates were significant (p < 0.05).

The AMOS normality test yielded multivariate kurtosis value of 6.484 from the values for the observed variables in the final Japanese CFA model. The multivariate kurtosis value was Mardia’s coefficient values and the value of 6.484 exceeded 1.96, which indicated moderate non-normality (The University of Texas at Austin, 2009). Regardless, the accuracy of the estimates was still disputable. Hence, bootstrap parameter estimates were computed for each estimate in the model with 250 bootstrap samples.

Table 6.35 lists maximum likelihood parameter estimates (standardised regression weights, covariances, and coefficient determination $R^2$ values), bootstrap parameter estimates with bias-corrected confidence intervals (90%), and p-values for the final model along with the measurement model fit indices. As seen in the table, the bootstrap-based estimates and the bias-corrected confidence interval rejected that the parameter estimate was zero (p < 0.05) as well as the maximum likelihood-based estimates. Therefore, the final Japanese CFA model was accepted.
Table 6.35
Maximum Likelihood and Bootstrap Parameter Estimates for the Final Japanese CFA Model ($n = 252$)

<table>
<thead>
<tr>
<th></th>
<th>Maximum Likelihood Estimates</th>
<th>Bootstrap Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Estimates</td>
<td>Bias*</td>
</tr>
<tr>
<td>PR2 ← SN</td>
<td>.648</td>
<td>.657</td>
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<tr>
<td>PT1 ← SN</td>
<td>.385</td>
<td>.422</td>
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<tr>
<td>PT3 ← PT</td>
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<td>.562</td>
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<tr>
<td>PT4 ← PT</td>
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<td>.407</td>
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<tr>
<td>ED3 ← PT</td>
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<td>.561</td>
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<tr>
<td>PR4 ← PT</td>
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<td>.340</td>
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<tr>
<td>SN ← PT</td>
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<tr>
<td>$R^2$ (PR2)**</td>
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<td>.207</td>
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<tr>
<td>$R^2$ (PT1)**</td>
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<td>.327</td>
</tr>
<tr>
<td>$R^2$ (PT3)**</td>
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<td>$R^2$ (ED3)**</td>
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<td>.324</td>
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<tr>
<td>$R^2$ (PR4)**</td>
<td>.230</td>
<td>.237</td>
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</table>

Chi-square ($df; p$) 9.212 (8 .325)
GFI  .988
CFI  .987
RMSEA .025

Notes. All of the maximum likelihood-based estimates were significantly different from zero ($p < .05$).
* The bias column indicates the difference between the maximum likelihood-based estimate and the bootstrap-based estimate.
** Bias-corrected confidence intervals at 90%
*** $R^2$ indicates the coefficient of determination.

In addition to model fit, the face, convergent, and discriminant validities of the final Japanese CFA model were examined to assess the model’s construct validity, as with the final Australian CFA model. Although the final Japanese model did not agree with the hypothesised three-factor construct, inconsistency of the contents was not found and face validity of each construct was assured.

The final Japanese CFA model included variables with a standardised regression weight less that 0.5 which has been considered necessary for the convergent validity of the measurement model (Hair et al., 2006). However, considering the present study was
relatively new, it seemed justifiable to accept variables with the weights less than 0.5 as long as face validity and the model fit indices met the acceptance criteria.

Discriminant validity of the Japanese model was assessed by fixing covariance between the two latent factors as equal 1, as implemented into the final Australian CFA model. The fit statistics from this single factor model were: the $\chi^2$ was 96.891 with 9 degrees of freedom ($p \leq 0.001$). The model CFI was 0.079, with RMSEA of 0.197. All of these measures varied from the criteria of good fit, while the two factor model showed good fit. In addition, the statistic of $\chi^2$ difference between the single factor and two factor models was: $\chi^2 = 87.679 > 7.8794$ at $p = 0.005$ level. These results supported the significant superiority of the two factor model over the single factor model: that is, discriminant validity of the Japanese model was assured.

From these results, construct validity of the Japanese final CFA model for readiness to accept government’s social marketing approaches appeared to be confirmed.

As in the case of the Australian models, CFA was not performed on two other Japanese measurement models; readiness to accept government involvement in social marketing activities and values related to the freedom of the individual, because of an identification issue. The hypothesised model for the readiness had three indicators in which the model was just identified. The hypothesised model for the values had two indicators in which the model was underestimated. In the both cases, CFA cannot estimate parameters for the hypothesised model on its own. Therefore, they were integrated into the hypothesised structural model in order to gain the spare degree of freedom from other measurement models (Schumacker & Lomax, 1996). The results of the overall model are reported below.

**Structural models**

The hypothesised Japanese structural model was tested with $n = 252$, using an AMOS 17.0 software program. Figure 6.8 depicts the hypothesised Japanese structural model diagrammed in AMOS.
The model indicates that the latent variable VA (values related to the freedom of the individual) affects the latent variable GV (readiness to accept government being involved in social marketing activities) directly, and VA influences the latent variables SN (social norms) and PT (readiness to accept government’s paternalistic social marketing approach) indirectly through meditation by GV. A total of 17 regression weights and VA variance were fixed as shown as equal 1.

The AMOS program reported that a variance of \( e_2 \) was less than zero, which is termed a Heywood case. In the Heywood case, the solution provided by the AMOS program is likely to be inaccurate and the estimates are illogical as a variance can never be negative (Hair et al., 2006). To solve this problem, Kolenikov, Bollen, and Savalei (2006) suggested three remedies; 1) ignore the problem, 2) fix the offending parameter to a very small positive value, 3) perform Wald or LP test to check the offending parameter covers zero. The most interest in this structural model test was model specification, that is, accepting or rejecting the hypothesised model; therefore, the first option was not appealing to the researcher. Through the second option, the necessary solution would be obtained; however, the model fit tends to be low as the fixed value is different from the true values (Hair et al., 2006). Therefore, by taking advantage of the AMOS program to provide estimates even in the Heywood case, the researcher decided to check, through a Wald test, if the offending parameter covered zero. The Wald statistic for \( e_9 \) was -0.938 that was far below 1.96. From this, it was reasonably assumed that variance of \( e_9 \) covered zero. This meant that the hypothesised model was not appropriate (Kolenikov et al., 2006). The conclusion was also consolidated by a standardised regression weight of 3.85 from VA to VA5 that exceeded 1.0 in the model. Although the estimates in the Haywood case are illogical and not reliable, this result was considered to indicate model rejection as well. Other results for this model test, including model fit and parameter estimates are not reported here because of their inaccuracy.
Figure 6.8 Hypothesised Japanese structural model as diagrammed in AMOS

Note. Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Each observed variable has an error in measurement.
Although the overall hypothesised Japanese structure model was rejected, the structural model of relationships among GV, SN, and PT was analysed to test whether GV affects SN and PT or not.

The hypothesised model was tested with $n = 252$, using an AMOS 17.0 software program. Figure 6.9 depicts the hypothesised Japanese structural model of GV, SN, and PT along with parameter estimates (standardised regression weights and coefficients of determinacy $R^2$) yielded through the initial test. All of the estimates were significant ($p < 0.05$), except of a path from SN to PT1.

The model indicates that the latent variable GV (readiness to accept government involvement in social marketing activities) influences the latent variables SN (Social norms) and PT (readiness to accept government’s paternalistic social marketing approach) directly. A total of 13 paths of regression weights and GV variance were fixed as equal 1.

The results suggested a less than acceptable fit (see table 6.31 for the recommended indices for model acceptance):

- Minimum Fit Function Chi-Square = 40.361 ($p = 0.027$)
- Degrees of Freedom = 25
- Goodness of Fit Index (GFI) = 0.966
- Comparative Fit Index (CFI) = 0.929
- Root-mean-square Error of Approximation (RMSEA) = 0.049
Figure 6.9 Hypothesised Japanese structural model of GV, SN, and PT with parameter estimates

Note. Latent variables are represented by ovals and observed variables by squares. Relationships between the latent variables and observed variables are represented by one-headed arrows. Each observed variable has an error in measurement.

All estimates were significant \( (p < 0.05) \), except for the path from SN to PT1.

Like the overall hypothesised structural model, reasonable suggestions for the model modification could not be found. Hence, it was concluded that the Japanese structural model of GV, SN, and PT was rejected as well as the overall model.

The AMOS normality test yielded multivariate kurtosis value of 19.948 from the values for the observed variable in the hypothesised model. The multivariate kurtosis value exceeded 10, which indicated severe non-normality (The University of Texas at Austin, 2009). Hence, bootstrap parameter estimates were computed for each estimate in the model with 250 bootstrap samples.

Table 6.36 lists maximum likelihood parameter estimates (standardised regression weights and coefficient determination \( R^2 \) values), bootstrap parameter estimates with bias-corrected confidence intervals (90%), and p-values for the hypothesised model along with the measurement model fit indices. The entire bootstrap-based estimates did not include zero as well as the likelihood-based estimates. The bootstrap-based estimate for \( PT1 \leftarrow SN \) failed to reject that the parameter has zero as well as the maximum
likelihood-based estimate. The bootstrap-based estimates for SN ← GV, $R^2(SN)$, and $R^2(PT1)$ also failed to reject that the parameters have zero, opposed to the maximum likelihood-based estimates.

Table 6.36
Maximum Likelihood and Bootstrap Parameter Estimates for the hypothesised Japanese structural model with three latent variables ($n = 252$)

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<th>Bootstrap Estimates</th>
<th>Maximum Likelihood Estimates</th>
<th>Mean Estimates</th>
<th>Bias*</th>
<th>Lower**</th>
<th>Upper**</th>
<th>P-values</th>
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<td>.404</td>
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<td>.289</td>
<td>.537</td>
<td>.010</td>
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<td>.008</td>
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<tr>
<td>GV8 ← GV</td>
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<td>.005</td>
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<td>.535</td>
<td>.008</td>
</tr>
<tr>
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</tr>
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<td>$R^2(SN)$***</td>
<td>.052</td>
<td>.110</td>
<td>.058</td>
<td>.001</td>
<td>.163</td>
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<tr>
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<td>.745</td>
<td>.041</td>
<td>.389</td>
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<tr>
<td>$R^2(GV1)$***</td>
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<td>.187</td>
<td>.005</td>
<td>.084</td>
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<tr>
<td>$R^2(GV7)$***</td>
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<td>.217</td>
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<tr>
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<td>.172</td>
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<td>.000</td>
</tr>
<tr>
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<td>.050</td>
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<td>-.008</td>
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<td>.008</td>
</tr>
</tbody>
</table>

Chi-square ($df; p$) 40.361 (25; .027)
GFI .966
CFI .929
RMSEA .049

Notes. All of the maximum likelihood-based estimates were significantly different from zero ($p < 0.05$), except for PT1 ← SN.
* The bias column indicates the difference between the maximum likelihood-based estimate and the bootstrap-based estimate.
** Bias-corrected confidence intervals at 90%
*** $R^2$ indicates the coefficient of determination.
To assess reliability of the results of the Japanese SEM analyses, the results were compared with correlations among VA2*, VA3*, VA4*, VA5*, Q11-1 (single-item scale for readiness to accept government’s educational social marketing approach), Q11-2 (single-item scale for readiness to accept government’s promotional social marketing approach), Q11-3 (single-item scale for readiness to accept government’s paternalistic social marketing approach), and Q11-4 (single-item scale for readiness to accept government involvement in social marketing activities). See section 6.7.1b of this chapter for these four single-item scales.

There were significant negative relationships between VA5* and Q11-1 (education), Q11-2 (promotion), Q11-3 (paternalism): $\tau = -0.217, p < 0.01, \tau = -0.159, p < 0.01$, and $\tau = -0.201, p < 0.01$, respectively. In addition, there were significant positive relationships between Q11-4 (involvement) and Q11-2, Q11.3: $\tau = 0.250, p < 0.01$, and $\tau = 0.260, p < 0.01$, respectively. These results did not fully agree with those from SEM analyses. This suggests that the results from the Japanese model should be interpreted carefully, taking into account other information.

### 6.8 Summary

This chapter described the main questionnaire survey and provided analyses of relationships among values related to the freedom of the individual, readiness to accept government involvement in social marketing activities, and readiness to accept government’s social marketing approaches.

For readiness to accept government’s social marketing approaches, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed and revealed that the Australian final model agreed with the hypothesised three-factor model (educational, promotional, and paternalistic approaches). However, the Japanese final model disagreed with the hypothesised model, and instead, yielded a two-factor model (social norms and paternalistic approach). For perceptions of values related to the freedom of the individual, and of readiness to accept government involvement in social marketing activities, the
results of EFAs also indicated that Australian and Japanese final models were not identical.

As suggested by these results, structural equivalence of these three measurement models between Australian and Japanese groups was rejected; therefore, multi-group confirmatory factor analysis (MG-CFA) and multi-group mean and covariance structure (MG-MACS) analysis, which the present study originally planned to perform, were not employed.

In the course of the above investigations, the five main and the five sub hypotheses of the present study were tested through a hypothesised structural model (see figure 6.1 of this chapter).

The first main hypothesis explored relationships between university students’ perceptions of values connected with the individual freedom and their readiness to accept government involvement in social marketing activities. Structural equation modeling (SEM) analyses found that the hypothesised relationships did not fit for the Australian or Japanese university students. Thus, H1 was rejected in both the Australian and Japanese groups.

The second main hypothesis tested relationships between university students’ readiness to accept government involvement in social marketing activities and their readiness to accept government’s educational social marketing approach. SEM analyses showed that the hypothesised relationships did not fit Australian university students that the present study actually investigated. With respects to Japanese students, EFA and CFA suggested that readiness to accept government’s educational social marketing approach would not construct Japanese readiness to accept government’s social marketing approaches. Hence, H2 was rejected in both Australian and Japanese groups.

The third hypothesis investigated relationships between university students’ readiness to accept government being involved in social marketing activities and their readiness to accept government’s promotional social marketing approach. SEM analyses showed that
the hypothesised relationships did not fit for the Australian university. With respect to the Japanese students, EFA and CFA suggested that readiness to accept government’s promotional social marketing approach would not construct with the Japanese readiness to accept government’s social marketing approaches. Hence, H3 was also rejected in both the Australian and Japanese groups.

The fourth main hypothesis explored relationships between university students’ readiness to accept government involvement in social marketing activities and their readiness to accept government’s paternalistic social marketing approach. SEM analyses showed that the hypothesised relationships did not fit for both the Australian and Japanese university students. Hence, H4 was, again, rejected in both the Australian and Japanese groups.

Sub-hypotheses were formulated on the premise that construct of the five latent factors (Values, Readiness of involvement, Education, Promotion, and Paternalism of the hypothesised structural model in figure 6.1 of this chapter) were identical between Australian and Japanese groups. However, no equivalence of them was assured. Therefore, sub-hypotheses were not able to be tested through SEM analyses. However, those hypotheses were alternatively tested, using the single-item scales for readiness to accept government involvement in social marketing activities, readiness to accept government’s educational, promotional, and paternalistic social marketing approaches, importance of the individual freedom for society, and importance of the individual freedom for an individual. These alternatives found that:

The Australian university students appeared to consider the individual freedom more important than the Japanese university students. Hence, H1a was accepted.

Japanese university students appeared ready to accept government involvement in social marketing activities more than Australian university students. Hence, H1b was accepted. However, the Australian and Japanese university students appeared ready to accept government’s educational social marketing approach similarly. Hence, H2a was rejected.
With regard to readiness to accept government’s promotional and paternalistic social marketing approaches, the Japanese university students appeared ready to accept it more than the Australian university students. Hence, H3a and H4a were accepted.

As explained in section 6.1 of this chapter, the last main hypothesis (H5) required full discussion with both quantitative and qualitative information. Therefore, relationships between readiness to accept government’s social marketing activities and actions were not fully investigated in this chapter. Instead, the relationships are explored in the next chapter, based on the results reported in section 6.7.1c of this chapter and the information provided in section 2.6 of chapter 2, as well as discussions on the other findings above.
Chapter 7: DISCUSSION, LIMITATIONS, AND IMPLICATIONS

This chapter initially discusses the results of the present study in relation to the research questions posed in chapter 1, drawing on the literature reviewed in chapter 2 as well as on information provided in other chapters and from other previous research. Following these discussions, limitations of the present study are acknowledged. After the limitations, implications for attitude and behaviour theories in a social marketing context and for its practices are considered. This enhances a deeper understanding of the determinants of people’s attitudes and behaviours, and the improvement of effective social marketing activities. Lastly, this chapter concludes with suggestions for future research efforts.

7.1 Summary of Findings

The main purpose of this study was to investigate the influence of values relating to the freedom of the individual on readiness to accept government-sponsored social marketing activities in Australian and Japanese university students. To achieve this objective, the present study:

- investigated the role of readiness to accept government-sponsored social marketing activities in determining actual responses through focus groups implemented with the cooperation of matched cohorts of Australian and Japanese university students;
- confirmed the above role through comparisons among students’ readiness to accept actual social marketing activities by government, and self-reported general attitudes and behaviours (H5);
• explored key elements in operationalising the concept of readiness to accept government-sponsored social marketing activities through focus groups implemented with Australian and Japanese university students;
• explored Australian and Japanese university students’ definitions of individual freedom through focus groups and open-ended questions;
• tested by quantitative means whether Australian university students valued individual freedom more than their counterpart Japanese university students (H1a);
• tested quantitatively relationships among values relating to the freedom of the individual, readiness to accept government being involved in social marketing activities, and readiness to accept government’s social marketing approaches (H1, H2, H3, and H4);
• tested whether Japanese university students were higher in readiness level to accept government-sponsored social marketing activities than Australian university students by quantitative means (H1b); and
• tested quantitatively whether Japanese university students were higher in readiness level to accept government’s educational, promotional and paternalistic social marketing approaches (H2a, H3a, and H4a).

These attempts found that:

• readiness to accept government-sponsored social marketing activities was likely to affect an individual’s decision to take action as recommended or not, mediated by government’s actual approaches (H5);
• readiness to accept government-sponsored social marketing activities appeared to have two underlying concepts: readiness to accept government being involved in social marketing activities, and readiness to accept government’s social marketing approaches. However, the Australian and the Japanese university students seemed to have different lower-order constructs of readiness to accept government’s social marketing approaches;
• Australian and Japanese university students appeared to define the concept of individual freedom differently. For the Japanese university students, the word
‘individual freedom’ had both positive and negative connotations, while for the Australians, the words were essentially connoted positively;

- The Australian students appeared to consider individual freedom to be more important than did their Japanese counterparts (H1a);
- Structural equation modeling revealed no relationships among values relating to the freedom of the individual, readiness to accept government’s involvement in social marketing activities, and readiness to accept government’s social marketing approaches to be detected (H1, H2, H3, and H4);
- Japanese university students, as expected, were more likely to accept government’s involvement in social marketing activities, government’s promotional social marketing approach, and government’s paternalistic social marketing approach than Australian university students (H1b, H3a, and H4a); and
- Japanese university students, unexpectedly, were unlikely to more readily accept government’s educational social marketing approach than Australian university students (H2a).

These findings are discussed more fully below.

7.2 Role of Readiness in Determining Action

This section discusses the role of readiness to accept government-sponsored social marketing activities in association with actual responses toward social marketing messages sent by government. This is immensely important because the present study becomes meaningful only when the role of interest is clearly articulated.

Since Prochaska and DiClemente (1983) introduced five different stages of readiness for behavioural change in their Transtheoretical Model (TTM), the influences of readiness on behavioural change were empirically detected and proved (Carey, Purnine, Maisto, & Carey, 1999). Therefore, it was highly possible that people at different readiness levels of acceptance towards a recommendation sent by government would also respond towards the recommendation differently and would take different actions.
In the present study, influence of readiness on whether an individual take action as recommended or not was considered to be congruent with readiness and government’s actual approaches, rather than readiness directly influencing it. The current research hypothesised that if a person’s readiness to accept government’s three social marketing approaches is congruent with government’s actual approaches, he/she is likely to accept a message sent by government and take action; however, on the contrary, if a person’s readiness to accept government’s three approaches does not meet government’s actual approaches, he/she is unlikely to accept a message sent by government and take action as recommended (H5).

Table 6.4 (Q11-1, Q11-2, and Q11-3) shows that the means of readiness scores for acceptance of government’s social marketing approaches were all above three, which meant that both Australian and Japanese university students accepted educational, promotional and paternalistic social marketing approaches. In addition, means of the Japanese scores were significantly higher than Australian scores in promotional and paternalistic approaches, while the mean of Australian scores was significantly higher than that of the Japanese for the educational approach. Thus, if readiness influenced actions directly, Japanese university students should take action as recommended more than Australian university students. However, the results were opposite, the depictions for Q12-5 (see table 6.6), showed significantly more Australian university students reported their awareness of a socially desirable behaviour to be increased by a government’s social marketing campaign; they take action more than the Japanese university students. Alternatively, it can be said that 43% of Australian respondents agreed that government-sponsored social marketing campaigns increased their awareness of socially desirable behaviours, taking actions when appropriate; however, only 20% of the Japanese respondents agreed their awareness increased and taking action, based on the results of Q12 (see appendix 7A). These inconsistencies may have occurred because of agreements and disagreements between social marketing receivers (the current university cohorts) and social marketing providers (present Australian and Japanese Governments in this study). The Australian Government has emphasised educational and promotional social marketing approaches, which was in agreement with the Australian university students’ acceptance of such approaches (see chapter 2). Accordingly, this
cohort of students tended to adopt the socially desirable behaviours recommended by the government. However, the main strategy of the Japanese Government’s social marketing activities was the paternalistic approach, which disagreed with the Japanese students’ acceptance of its approaches. Therefore, this cohort of students tended not to take any of the government’s recommended actions. This could be rephrased to indicate it may be difficult for human beings to deal with something exceeding their capacities or acceptance, a phenomenon metaphorically depicted in figure 1.2. From these interpretations it became apparent that readiness levels alone did not predict action; however, readiness appeared to be capable of predicting whether an individual would take action or not when compared with actual approaches.

Figure 7.1 was created to depict the function of readiness to accept government’s three social marketing approaches in comparison with government’s actual approaches, using radar chart-based shapes. The shapes of university students’ readiness are formed, based on the means of observations of Q11-1, Q11-2, and Q11-3 (single item scales for readiness to accept government’s three social marketing approaches: educational (ED); promotional (PR); and paternalistic (PT). For detailed results refer to section 6.7.1b). Shapes illustrating actual approaches by government are formed based on the knowledge reviewed in section 2.6 of chapter 2.

The shape of Australian university students’ readiness is almost congruent with the shape of Australian Government’s actual approaches; however, the shape depicting Japanese university students’ readiness disagrees with the shape of the Japanese Government’s actual approaches. Therefore, despite the conclusion that the Japanese readiness levels as a whole were higher than those of Australians, the former did not take action as avidly as Australian students. Thus, it can be reasonably assumed that, in order to make target audiences take action as desired, social marketing providers, namely governments in this study, must approach these in a manner that matches their readiness. This finding supports previous research into the concept of readiness to change (Dijkstra et al., 1998; Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000; Prochaska & DiClemente, 1983) and to the best of the researcher’s knowledge and belief, this study is the first to demonstrate that readiness of acceptance in a general social marketing context
could be an important factor in determining whether a provided social marketing campaign will work effectively or not.

![Diagram](image)

a. Australian readiness (left) and Australian Government’s approach (right)

![Diagram](image)

b. Japanese readiness (left) and Japanese Government’s approach (right)

**Figure 7.1** Comparisons between students’ readiness and governments’ approaches by ethnicity

*Note.* ED, PR and PT represent government’s educational, promotional and paternalistic social marketing approaches respectively. The scales represent the means of the Australian and the Japanese scores.
7.3 Readiness of Acceptance

This section discusses the findings concerning readiness to accept government-sponsored social marketing activities from three perspectives: 1) conceptual constructs of readiness, mainly based on the results from multi-item measurement scales; 2) relationships between readiness of subjects to accept government’s involvement in social marketing activities and their readiness to accept government’s social marketing approaches; and 3) comparisons between the cohorts of Australian and Japanese students’ readiness to accept these government interventions.

7.3.1 Conceptual constructs of readiness to accept

In the analysis of statements provided by focus groups, pattern coding revealed that a concept of readiness to accept government-sponsored social marketing activities appeared to consist of two different components: 1) readiness to accept government’s involvement in social marketing activities, and 2) readiness to accept government’s social marketing approaches. This two-component construct of readiness to accept government-sponsored social marketing activities was confirmed quantitatively through exploratory and confirmatory factor analyses in both the Australian and the Japanese university students (see sections 6.7.2b and 6.7.2c for details). However, it was interesting to note that although both the Australian and Japanese focus groups each raised the subjects of educational, promotional and paternalistic social marketing approaches as influencing readiness to accept government’s social marketing approaches, exploratory and confirmatory factor analyses confirmed these three approaches only to the Australian cohort’s readiness to accept government’s approaches. In contrast, it was found that social norms and a paternalistic approach consisted of the Japanese cohort’s readiness to accept government’s social marketing approaches. These differences could be explained by taking into account the Japanese notion of “omote [front] and ura [back]” (Doi, 2002, p. 8) or ‘Tatemae’ and ‘Honnne’ in the Japanese society.

In the Japanese language, ‘Tatemae’ means “official, public, socially required reality”; and ‘Honnne’ means “informal, personal reality in disregard of social parameters” (BBC, 2001). In fact, the meanings of these two words are opposed to each other; however, for
Japanese both ‘Tatemae’ and ‘Honnne’ are real and in most of cases, ‘Honnne’ (personal reality) is concealed behind ‘Tatemae’ (socially required reality) to maintain harmony in the society (Doi, 2002). It should be emphasised again here that ‘Tatemae’ is different from a lie or pretence to make one look good to others in the western society; however, it is a lie or pretence, Japanese agree which could occur, no matter what their ‘Honnne’ is. Hence, both the findings provided by the Japanese focus group and quantitative analyses may be real for them. However, it is reasonably assumed that the former findings were ‘Honnne’, and the latter ‘Tatemae’ for the Japanese respondents; and that they may choose either ‘Honnne’, or ‘Tatemae’, depending on given situations. In sum, individual Japanese had personal opinions about each of government’s educational, promotional, and paternalistic social marketing approaches - a finding of the Japanese focus groups. However, being simultaneously members of the Japanese society, this cohort believed the government should solve social issues, arranging general rules and environments, believing that it was capable of solving social issues in an authoritative manner. This discrepancy between ‘Honnne’ and ‘Tatemae’ could well explain the construct differences of readiness to accept government’s social marketing approaches which occurred between Australian and Japanese university students. It also clarifies the difference between the findings from the Japanese focus groups and the findings from exploratory and confirmatory factor analyses.

The above discussion leads intuitively to the expectation that other unique conceptual constructs of readiness emerging from other cultures will lead people to respond differently to government-sponsored social marketing activities. However, further research is needed to confirm or refuse such intuitions.

### 7.3.2 Relationships between two components of readiness

When the relationship between the two components of readiness to accept government-sponsored social marketing activities was considered after the pilot test, it appeared logical and natural to accept that readiness to accept government’s involvement in social marketing activities would antedate readiness to accept government’s social marketing approaches. However, this relationship was not detected either in the Australian or the Japanese structural equation modellings. At first, this finding appeared
logical as the pattern of the two different elements of readiness agreed with the two
different components of predispositions: a cognitive-based predisposition and an
affective-based predisposition (Ajzen, 2001). Also, the antecedent role of a
cognitive-based predisposition to an affective-predisposition was confirmed by numerous
studies (Brady & Robertson, 2001; Oliver, 1997). That is, readiness to accept
government’s involvement in social marketing activities was regarded as a
cognitive-based predisposition because the statements related to this readiness included
the participants’ past experiences and evaluations; and readiness to accept government’s
social marketing approaches was considered an affective predisposition because the
statements related to this readiness were allied with respondents’ emotions. However,
additional review of the literature confirmed that this finding supported a
cognitive-affective system theory proposed by Mischel and Shoda (1995) where
cognitive- and affective-based predispositions were viewed comprehensively, rather than
 hierarchically. That is, readiness to accept government’s involvement in social marketing
activities and social marketing approaches were embedded in the different dimensions
composing readiness to accept government-sponsored social marketing activities;
however, they were probably at the same dimensional level. Accordingly, it was
understandable that there were no hierarchal relationships between them. However, the
present study could not reach the point where functions of readiness to accept
government’s involvement in social marketing activities were specified. One possible
explanation could be that readiness to accept government’s involvement in social
marketing activities would determine the volume of an audience’s acceptance (see figure
1.2-1 of chapter 1 for this metaphor), while readiness to accept government’s social
marketing approaches appeared to determine his/her acceptable shape of the approaches,
although this explanation seems too abstract. Further research would be required to
validate these discussions.

7.3.3 Comparisons of Australian and Japanese readiness

Although the observations of multiple-item measurements found different constructs of
readiness to accept government-sponsored social marketing activities between the
Australian and the Japanese university students, it became possible to compare readiness
levels to accept these activities between them by using the scores measured by
single-item scales (see section 6.7.1b). Similar to the constructs identified by
multiple-item scales, the interpretation of the single-item scales also showed differences between the Australian and the Japanese university students. Figure 7.2 depicts visually the differences in readiness levels for acceptance of government’s educational, promotional, and paternalistic approaches by combining the radar charts of figures 7.1a and 7.1b.

![Radar Chart](image)

**Figure 7.2** Comparison of Australian and Japanese readiness to accept government’s educational, promotional, and paternalistic social marketing approaches

*Note.* ED, PR and PT represent government’s educational, promotional and paternalistic social marketing approaches respectively. The scales represent the means of the Australian and the Japanese scores.

A notable difference was that, contrary to the hypothesis, the Japanese readiness level to accept government’s educational social marketing approach was significantly lower than that of the Australian cohort, while as hypothesised the Japanese readiness levels were significantly higher than that of the Australians on the other two approaches. The present study postulated that the higher a person’s readiness level to accept government’s paternalistic approach is, the higher his/her readiness levels to accept government’s educational and promotional approaches. However, the results appeared to suggest that a person who accepts a paternalistic approach does not necessarily accept educational or promotional approaches at the similar level.

This finding is immensely important for developing social marketing strategies. Educational, promotional, and paternalistic approaches were used individually for social changes; however, social marketing today requires treating these different approaches
complementarily (Andreasen, 2006). When these complement each other, there are infinite ways of mixing them. However, if target audiences’ readiness levels of acceptance towards each approach can be known beforehand, development of more effective strategies could be possible by placing exact emphases on each approach so as to match the target audiences’ readiness levels. For example, although the Western Australian Government has decided to introduce tougher laws on drink driving (Joint Transport Research Centre, 2008), if readiness patterns to accept government’s social marketing approaches are taken into account, the government should emphasise education, such as promoting information about the effects of alcohol on driving or the consequences of drink driving-related crashes, to drivers in student groups rather than the laws. This should be more effective in influencing the attitudes and behaviours of young drink drivers.

7.4 Values Related to Individual Freedom

This section discusses the results concerning to values relating to the freedom of the individual, focusing mainly on the Australian and the Japanese cohort’s separate perceptions of individual freedom. The influence of values as they relate to the freedom of the individual on readiness of acceptance is discussed later.

Analyses of statements given by the focus groups and descriptions provided to the two open-ended questions about similar and opposite concepts of individual freedom confirmed that university students found the words ‘individual freedom’ have different meanings (see section 6.7.1f and appendix 6A). The Australian university students perceived individual freedom as a positive concept; however their Japanese counterparts perceived the concept both positively and negatively. Although the Australian and the Japanese positive perceptions of individual freedom were similar, the Japanese cohort believed that individual freedom meant ‘selfishness’ at the same time. This finding agreed with those of earlier studies, including Doi (1981), Nakane (1973), and Wierzbicka (1997). This difference was reflected the results of Q13-1 (conformity tendency), Q13-2 (comparison between individual freedom and social harmony), Q13-1 (importance of individual freedom in society), and Q13-4 (importance of individual
freedom for oneself), which are detailed in sections 6.7.1d and 6.7.1e of chapter 6, and the results of rescaled Q13-1 and Q13-2 (see appendix 7B).

Both Australian and the Japanese university students described themselves as persons who conformed to social norms. However, when they were asked to compare concepts of ‘individual freedom’ and ‘social harmony’, the Japanese students included significantly more respondents who believed ‘social harmony’ was more important than ‘individual freedom’. They defined ‘individual freedom’ to be partly selfishness, because that would disturb social harmony so highly regarded in the Japanese society (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000). Conversely, for Australian university students, ‘individual freedom’ had only positive meanings; therefore, it was difficult for them to compare individual freedom and social harmony as these two concepts were not necessarily mutually exclusive.

The Australian and the Japanese cohorts both appreciated the importance of individual freedom for their societies; however, with regard to the importance for an individual, the Japanese importance level was significantly lower than that of the Australian’s. The negative connotation of individual freedom was also reflected in this result. As seen in the Universal Declaration of Human Rights, Article 1 (The United Nations, 1948), the importance of individual freedom for the whole of society could be considered a global standard. Therefore, parallel with public opinion, Australian and Japanese university students agreed with the importance of individual freedom as a basic tenet of their societies. However, partly because individual freedom was perceived by the Japanese university students as being negative as well as positive, and partly because they considered ‘individual freedom’ could disturb ‘social harmony’, their importance degree of individual freedom for an individual could be lower than that for the Japanese society, and also lower than that for the Australian society of their Australian counterparts.

The discussions in this section are important in that they have demonstrated the words ‘individual freedom’ to have different meanings and cultural emphases for the Australian and the Japanese university students. At the same time, as anthropologists and psychologists reiterated (e.g. Berry, 1989; Berry et al., 2002), these discussions also
encourage researchers to be more attentive to the deeper concepts behind a value of interest and to the various approaches for understanding explanations of results, when values are measured and compared between different groups. Numerous measurements of values were developed, including Values and Life Style (Mitchell, 1983), Portrait Values Questionnaire (Schwartz, 2008), and Rokeach Value Survey (Rokeach, 1967); these have been widely applied to studies of cross-cultural comparisons. However, it should be born in mind that these measurements were developed with western cultures as their basis. Therefore, there could be conceptual gaps between values of respondents from different cultures.

7.5 Influence of Values on Readiness

This section discusses the results concerning relationships among values relating to the freedom of the individual and readiness to accept government-sponsored social marketing activities.

The present study detected no influence of values relating to the freedom of the individual on readiness to accept government’s involvement in social marketing activities or its social marketing approaches in the tested hypothesised structural model. At first glance, these results appeared to contradict the value-attitudes-behaviour theory of Rokeach (1976) and published studies in health and recycling related contexts (e.g. Chernoff & Davison, 1999; McCarty & Shrum, 1994). However, they can be interpreted correctly as those particular values related to the freedom of the individual alone; they did not predict readiness of acceptance, although values could influence readiness to accept government-sponsored social marketing activities in another way. This explanation is further discussed below from two perspectives: coherent value-domains; and complexity of social issues.

7.5.1 Coherent value-domains

In the field of ecological policies and environmental psychology, Stern and Dietz (1994) advocated value-based theory for ecological behaviours. The theory was empirically
tested and proved that personal values and beliefs influence, not only attitudes and behaviours towards a particular environmental issue, but also one’s acceptance to environment-related policies (Dietz, Fitzgerald, & Schwom, 2005; Steg, Dreijerink, & Abrahamse, 2005). Therefore, values related to the freedom of the individual influence readiness to accept government-sponsored social marketing activities. If this is so, why weren’t values related to the freedom of the individual found to influence readiness of acceptance in the present study. A clue to this question’s answer was found in an article by Jagers and Matti (2010) after data for the present study had been collected. In their article, they suggested the mere measurement of single value-items, such as freedom, success, and social justice would not provide enough information to explain attitudes. They asserted that in order to investigate the influence of values, these should be comprehensively analysed, taking into account compatibility and conflict with other values and value-domains to which each of these values belongs. In fact, the authors measured the importance of 20 basic values, using the Schwartz’s value inventory (1992) and found that Swedes placed special emphases on values of freedom and family security. However, instead of employing these results directly for predicting ecological attitudes, they compared the importance of all the measured basic values, based on their value-domains. Thus, freedom was classified in an ‘Openness to change’ domain together with independence, creativity, curiosity, and a varied life. However, the authors did not use the openness to change domain as an indicator for ecology-related attitudes and behaviours because compared with other domains, the openness to change domain was less likely to link ecological attitudes and behaviours than other ‘Self-enhancement’, ‘ Social’, and ‘Universal’ domains as suggested by early studies (e.g. Axelrod, 1994; Stern, Dietz, Kalof, & Guagnano, 1995). If this value domain-based approach is applied to the present study, the results could be interpreted as explained in the following paragraph.

Although values relating to the freedom of the individual were important for both the Australian and the Japanese university students, the values alone would not have enough strength of ability to predict readiness of acceptance towards government-sponsored social marketing activities. However, when domain-based influences of values relating to the individual freedom on readiness to accept government-sponsored social marketing activities was considered, the openness to change domain, to which freedom belongs,
would relate to the readiness of acceptance, or possibly other domains would. Further research is needed before judgement can be passed on this question.

### 7.5.2 Characteristics of social issues

As discussed in the previous section, recent studies in environmental policies and ecological psychology suggested a variable of importance to the present study: domain-based values. These studies also indicated possibilities for the changeability of dominant values to determine attitudes and behaviours, depending on a targeted social issue. Axelrod (1994) and Steg, Dreijerink, and Abrahamse (2005) identified the values that influenced ecological behaviours; however, they appeared unlikely to always dominate socially desirable attitudes and behaviours. In fact, in the focus groups of the present study, many of the participants mentioned that having more children and recycling were different issues, adding that recycling was a social issue, but having more children was an individual matter (although, in fact, the declining birth rate is undoubtedly a social issue for many governments in the world today). In addition, many of the Australian participants claimed that they could accept a government’s social directive on recycling; however, they could not accept the directive to have more or less children, believing that no one should tell them how to implement their immediate lifestyle (see section 4.7.3 and appendix 4C for focus group summaries). These focus group statements appeared to suggest high possibilities for the influence of values relating to the freedom of the individual on readiness to accept government-sponsored social marketing activities. However, at the same time, they also appeared to suggest that values relating to the freedom of the individual would have an influence on readiness to accept government-sponsored social marketing activities only if a recommended behaviour is regarded as an individual matter.

Characteristics of social issues are not always the same and they have become even more complex today (Andreasen, 2006; Kotler & Lee, 2008). Although the present study attempted to illuminate the influence of values on readiness to accept government-sponsored social marketing activities in general, this influence was found to occasionally differ. It depended either on the characteristics of the targeted social issue, or on individual perceptions as to whether government implements social marketing
activities for social good or government intervenes in an individual life style. Seemingly, environment-related studies have done much to advance value-based understanding of targeted audiences’ attitudes and behaviours in other social issues. Considering this deficiency, the present study was important in that it showed that values relating to the freedom of the individual have no significant influence on readiness to accept government-sponsored social marketing activities; the findings shed light on the necessity for further research efforts in order to identify the influence of values on other social issues in addition to environment-related social issues.

In the previous sections, the results of the present study were discussed separately under the key concepts of interest headings. Standing (2009) called these discussions first-order discussions which, for a PhD thesis are the precursors to the inclusion of higher-order discussions, based on further abstractions, to maximise the generalisability of the results. Therefore, the next two sections should discuss the results from two new perspectives: cultural influence on differences and governmental ethics. However, as these discussions are beyond the scope of the research questions, the previous discussions are summarised here before proceeding to additional discussions.

The present study found the answers to the research questions as follows:

- Readiness to accept government-sponsored social marketing activities played an important role in influencing people’s action, compared with government’s actual approaches in this study (secondary research question 1);
- Readiness to accept government’s involvement in social marketing activities and readiness to accept government’s social marketing approaches emerged from the present study as key elements in operationalising the concept of readiness to accept government-sponsored social marketing activities. Concepts related to education, promotion, and paternalism were extracted from the present study for the Australian and the Japanese Government’s social marketing approaches. Social norms were revealed to be an additional element required for Japanese readiness to accept government’s social marketing approaches (secondary research question 2);
The present study hypothesised that values relating to the freedom of the individual influence readiness to accept government’s involvement in social marketing activities, and this readiness influence readiness to accept government’s social marketing approaches. However, these hypotheses were rejected when the hypothesised structural model was tested. Hence, secondary research question 3 remained unanswered. In order to pursue this question, further research must be implemented;

The focus group interviews informed that for both the Australian and the Japanese university students, individual freedom was something ‘not controlled by others’, ‘individualism’, or ‘positive feelings’. However, for the Japanese students, individual freedom included the negative connotation of selfishness (secondary research question 4);

The two research cohorts’ readiness levels to accept government-sponsored social marketing activities could not be compared in the structural model because the measurement models of the two different components of readiness were not equivalent. However, the scores measured by single-item scales revealed that the Japanese university students appeared more ready to accept government’s promotional and paternalistic social marketing approaches than the Australian students, while the Australian university students appeared more ready to accept government’s educational social marketing approach than the Japanese students. The Australian and the Japanese cohorts agreed on the degree of acceptance of government’s involvement in social marketing activities (secondary research questions 5, 5a, and 5b);

Like the previous concept of readiness, values relating to the freedom of the individual could not be compared between the Australian and the Japanese students using multiple-item scales in the structural model because of the non-equivalent nature of their respective measurement models. However, single-item questions concerning the importance of individual freedom for society and for individual respondents revealed that the Australian students emphasised individual freedom for them more than their Japanese counterparts. However, both cohorts of research students appreciated equally the importance of individual freedom for their respective societies similarly (secondary research question 6); and
In the course of investigating the secondary research questions, it was suggested that values related to the freedom of the individual have no significant influence either on readiness to accept government’s involvement in social marketing activities or on readiness to accept government’s social marketing approaches. However, the influence of values related to the freedom of the individual would be more clearly identified if the value-domain perspective was taken into account (primary research question).

Higher-order discussions based on further abstractions follow.

7.6 Cultural Influence on Differences

In the previous sections, fundamental differences between the Australian and the Japanese university students were often mentioned; these were based on the cultural influences. These cultural differences can be discussed according to the emic and etic modes suggested by Berry (1989) (see section 3.5.1b for details of this approach). Berry recommended that researchers should decide whether different cultures can be compared or not after discovering each culture and examining the possibility of comparison (see section 3.5.1b and figure 3.6). Applying his approach, the present study proposed a provisional position wherein the conceptual equivalence of values relating to the freedom of the individual were doubted; but construct, item, and scalar equivalence references to measure readiness to accept government-sponsored social marketing activities was proposed. However, in reality, the cultural differences between the Australian and the Japanese university students were so obvious and so influential that the differences formed distinct responses towards government-sponsored social marketing activities between the students. The present research contrasted Australian and Japanese university students; however, it could not find them comparable in the context of the present study: a social marketing context. The lack of comparability raises two important issues about today’s mainstream social marketing theories. First, mainstream theories and models were developed, based dominantly on western knowledge and these have been applied blindly to other non-western cultures (Maheswaran & Shavitt, 2000). However, as shown by the present study, the influence of cultural differences is too strong to ignore.
Therefore, these theories or models should be used with greater concern for cultural factors; these theories or models be modified to be compatible with the targeted cultures.

Second, one successful social marketing episode in a particular venue could be a failure in another. In current times, it is easier to discover successful social marketing approaches instantly through the internet (National Social Marketing Centre for Excellence, 2005; Social Marketing Institute, 2007a). However, such discoveries are not universal recipes for effective implementation of social marketing. They could provide variable information to support effective implementation of social marketing, but the approaches should be re-evaluated and modified for new target audiences, including cultural differences (Andreasen, 2006).

The present study found the focus group interviews to provide extremely valuable information on similarities and differences of opinions about government-sponsored social marketing activities between the Australian and the Japanese participants. This technique should be applied to social marketing in different cultures. For example, the successful approach of the Australian Sun Smart campaign (Cancer Council Australia, 2007) could be discussed by Japanese focus group participants for the elements of its success before applying them to an approach in the Japanese context. These discussion groups could reveal a predicted effectiveness for the approach to a Japanese campaign concerning a similar government concern; adopt these basic elements of the approach; and suggest a replication of the campaign mode modified according to cultural differences.

### 7.7 Governmental Ethics

This section is linked to section 7.9.2 implications for social marketing practitioners. In the implications section, the present study suggests the possibility of a proactive social marketing approach that attempts to change people’s values as socially desired. However, when this approach is considered, particularly at a government level, government should be aware of the risks of it being thought of as manipulative or guilty of propaganda. Most governments in the world would have the power to manipulate their citizens even forcefully using these cynical communications devices. An instructive example of these
devices is illustrated by the case of Hong Kong (Fairbrother, 2006) wherein targeted audiences of policy were both empowered and disempowered, depending on the state’s strategies.

O’Shaughnessy (1996) distinguished social marketing from propaganda by an emphasis on a customer focus. According to him, propaganda and social marketing shared similar approaches to influence people; however, they were conceptually different; social marketing being based on a target audience-centred concept, while propaganda is conceptually self-centred. The degree of government’s power differs among different countries; therefore, it is almost impossible to judge how much power government should use for its social marketing strategies, or how far it should impose its will on the citizenry. The exercise of power seems to depend on the ethics of a particular government; the hope is that these ethics are in step with its people’s ethics.

Discussions based on the findings of the present study have been completed by this section. The remaining sections of this chapter are devoted to limitations of the study, implications for theories and practice, suggestions for future consideration and relevant concluding remarks.

7.8 Limitations

A number of caveats need to be noted regarding the present study. First, generalisations of the findings should be made with care as respondents for the present study were selected from two universities, one for each ethnicity. Patterns of demographic characteristics of the research cohorts were similar to their population demographics statistically reported by the Department of Education Employment and Workplace Relations (2009) in Australia and the National Institute of Population and Social Security Research (2008) in Japan. Therefore, it appeared reasonable to consider that the respondents were likely to reflect backgrounds of the majority of Australians and Japanese undergraduate university students. In addition, equivalence of social status of university students, equivalence of an educational system, and equivalence of the administration between the two universities were also taken into account. However, as
long as respondents for the present study were not sampled nationally in each country, the results should not be over generalised.

Second, as reported in table 6.4, mean statistics of readiness to accept government’s involvement in social marketing activities and readiness to accept government’s three social marketing approaches exceeded three in both the Australian and the Japanese scores. In essence, this meant that the majority of research respondents of the present study were ready to accept government’s involvement and its three approaches, although their readiness levels varied. Therefore, a bias could exist in the respondents, answers and attitudes towards the government-sponsored social marketing activities in either country.

Third, reliability of measurement models in the tested structural equation model was not as strong as generally recommended. Although the best efforts were made to develop the best possible measurement models, paying maximum attention to sample selection, sampling procedures, data collection procedures, and data screening and treatment, the results of exploratory and confirmatory factor analyses of the three abstract concepts were not perfectly satisfied. The researcher has confidence in the finding that the influence of values related to the freedom of the individual on readiness of acceptance was not detected either in the Australian or the Japanese university students. However, it can be assumed that the present study may have missed other influential factors additional to the three concepts of interest in the study.

Fourth, the present study did not take into account value-domains. Therefore, it could not be ascertained whether the value, individual freedom, alone had no significant predictable ability for readiness of acceptance, or this value had no significant predictable ability as well as its domain - openness to change.

### 7.9 Implications

This section considers the implications of the present study, revisiting the discussions. The consideration is made from two perspectives: implications for attitudes- and
behaviours-related theories in a social marketing context, and implications for social marketing practitioners, including government.

7.9.1 Implications for theories in social marketing context

Three key implications for attitudinal and behavioural theories in a social marketing context emerged from the present study. First, the present study found the ability of readiness to accept government’s social marketing approaches to predict people’s response whether they will take action as recommended or not, compared with actual or planned social marketing approaches. This ability could be applied to all social marketing approaches. Rothschild (1999) suggested the most effective approach could be chosen on the basis of target population’s motivation, opportunity and ability. His suggestion shares a common viewpoint with the present study in that the target’s predispositions could suggest the most effective approach. However, investigating the target’s motivation, opportunity, and ability appears to be extremely complex with numerous combinations of these elements. Therefore, the accuracy of their predictability appears unstable; but, on the contrary, the examination of a target’s readiness levels to accept social marketing activities is simpler and more straightforward. In the present study, focus groups distilled government’s social marketing approaches to be education, promotion, and paternalism, and respondents were asked about their readiness levels regarding these three approaches. However, the approaches cannot be limited to these three, for as long as readiness of acceptance influences actions, any approaches could be subjects for investigation.

Second, the present study explored key elements to quantify the concept of readiness to accept government-sponsored social marketing activities. To the researcher’s best knowledge, no study has attempted to operationalise the concept of readiness to accept government-sponsored social marketing activities. Although it was disappointing that the present study could not develop satisfactory multiple-item measurement scales of the conceptual constructs being explored, it was extremely important for social marketing literature that the present study found key concepts of readiness to accept government’s involvement in social marketing activities and readiness to accept government’s social marketing approaches to a concept of readiness to accept government-sponsored social
marketing activities. These concepts could be useful when social marketing policies are investigated.

Third, the present study illustrated that cultures are highly influential in formulating its members’ attitudes and behaviours even in a social marketing context. Hence, social marketing theories and models, most of which were developed in America, have been modified and implemented in studies emanating from Australia and New Zealand during the past decade (Andreasen, 2006). However, these movements are hardly to be found in other non-western countries. Social marketing researchers in these non-western countries should take this fact more seriously so that they develop social marketing theories and models more suitable to their cultures.

The present study added the importance of value-based attitudinal and behavioural theories to today’s mainstream theories of attitude and behaviour in a social marketing context. The mainstream originated with the Health Belief Model that was established in the 1970s by Rosenstock (1974). Since then, the model has been improved and development accelerated by alternative models. Each theory and model has contributed to a deeper understanding and more accurate prediction of future attitudes and behaviours. However, these theories and models need a major breakthrough to deal with today’s social issues that are too complex to compare with those in the 20th century (Andreasen, 2006). In the environment-related field, one of today’s most important social issues on a world-wide scale, value-based theories have already started to be tested empirically. Like these empirical studies, the present study contributes to the importance of this value-based approach to attitudinal and behavioural theories and models in the social marketing context and for wider social issues. The present study suggests combining the value-based model with the existing models and theories, so that it is expected that many attitudes and behaviours not able to be explained in the existing theories and models could be given clear explanations.

7.9.2 Implications for social marketing practitioners

There are two major implications of the present study for social marketing practitioners, including government. First, social marketing practitioners could develop and implement
more effective social marketing strategies by measuring representative target audiences’ readiness for receiving possible approaches beforehand. For example, the Japanese Government has implemented social change activities dominated by a paternalistic approach traditionally and blindly, despite a highest readiness level for a promotional approach by the cohort of Japanese university students. As a result, the number of respondents rejecting the taking of some action as recommended was noticeably larger than the number of respondents who agreed to the proposition. In fact, the Japanese Government started to shift their paternalistic approach to a promotional approach for its food education activities (see chapter 2). However, up until the present, much taxpayers’ money has not been spent effectively because of the government’s ineffective food education activities. This waste could have been avoided if its target audiences’ readiness level of acceptance for its paternalistic approach to the Food Education activities had been known. Compared with the Japanese Government, the Australian Government appears to have succeeded in its social marketing activities. The majority of the Australian cohort agreed that they generally undertake some action as recommended. However, in the matters of speeding and drink driving the Australian Government has mainly used a paternalistic approach to change behaviours of the targeted audiences (see section 2.6 of chapter 2), resulting in a relatively large proportion of Australians feeling antipathy towards these activities. Considering the fact that the Australian university students showed the lowest readiness level of acceptance towards a paternalistic approach in the present study, the Australian Government should be more prudent when developing a paternalistic social marketing strategy. The present study demonstrates how a readiness-based approach to the selection of social marketing strategies would be useful for institutions or groups in any cultures.

Second, although the present study could not find relevant values influencing readiness to accept government-sponsored social marketing activities, it showed the potential for values to aid the determination of who was unlikely to accept a recommendation and behave accordingly. In practice, it may be more challenging for social marketing practitioners to encourage those who are negative to accept a recommendation and behave as recommended to change their behaviours. However, if these practitioners could clarify the nature of those, taking advantage of their relevant values in relation to these negative attitudes and behaviours, then marketers could take more proactive approaches
to them. In addition, it could be also possible to develop social marketing strategies aiming to change the values of those negatively disposed to the desired change as Dove (2009) attempted to change women’s values concerning beauty.

### 7.10 Suggestions for Future Research

In the previous section suggestions were made for application by social marketing practitioners. However, the present study was the first attempt to investigate relationships between values and readiness to accept social marketing approaches in a general social marketing context. Hence, in order to encourage the suggestions to be realised, the following five additional research efforts are required.

At the outset, a larger-scale investigation into relationships among values, readiness, and actions is needed to extend generalisability of the results. For example, a nation-wide investigation into university students, a comparison of different generations within a particular culture, and comparisons among various cultures would be immensely useful to develop tailor-made social marketing strategies.

Then, additional exploration, taking into account cultural differences as they influence the concept of readiness to accept government-sponsored social marketing activities, is needed to validate the relationship between this readiness and response across different cultures.

Next, additional exploration into concepts of readiness antagonistic to the acceptance of government-sponsored social marketing activities is needed to validate the relationship between this readiness and actions more firmly.

Additionally, taking into account the concept of value-domains, another investigation into key values influencing readiness to accept government-sponsored social marketing activities is needed to initiate proactively social marketing approaches in the general social marketing context and in a context of individual social issues.
Lastly, another attempt to redevelop or improve multiple-item measurement scales of readiness to accept government-sponsored social marketing activities is needed to measure this readiness more accurately.

7.11 Conclusion

The present study set out to explore the influence of values relating to the freedom of the individual on readiness to accept government-sponsored social marketing activities in Australian and Japanese university students aged between 18 and 23 years. Despite the limitations acknowledged in the appropriate section, this study makes tentative but original and significant contributions to the literature on attitudes/behaviours theories and models in a social marketing context. Although recently value-based approaches started to be applied frequently to ecological attitudes and behaviours, to date, no study has explored the concept of readiness to accept government-sponsored social marketing activities and investigated relationships between values and this readiness in a general social marketing context. The present study contributes to the existing literature in the following five ways:

1. The present study introduced a new concept: readiness to accept government-sponsored social marketing activities as another possible influence on actions, into the existing attitudes/behaviours theories and models in a social marketing context;
2. The present study conceptualised the readiness of Australian and Japanese young people to accept government-sponsored social marketing activities and developed new measurement scales for the readiness;
3. The present study demonstrated cultural differences between Australian and Japanese university students in perceptions of the concept ‘individual freedom’ and in the consequent readiness to accept government-sponsored social marketing activities;
4. The present study enhanced the importance of a value-based approach for the development of more practical social marketing theories and models; and
5. The present study demonstrated the usefulness of a mixed methods research approach, resulting in more comprehensive research.
The present study also makes practical contributions to practice of social marketing practitioners, including government in a twofold manner.

1. The present study demonstrated that young people’s readiness to accept social marketing approaches were related to their response. This relationship could be applied to select more effective combinations of social marketing strategies in accordance with the target audience’s readiness levels of acceptance; and

2. The present study showed the potential for values to influence readiness to accept social marketing activities by the development of proactive social marketing approaches, including an approach that aims to change or influence existing values.
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Appendix 4A Interview Protocol (English version)
Focus Group Interview Check List

Pre-Interview

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<td>Gift voucher</td>
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Interview Protocol
Kaoru NOSAKA
School of Marketing, Tourism and Leisure
Faculty of Business and Law
Edith Cowan University

Topic:
Views on social marketing campaigns (like “Reuse, Reduce, Recycle”)

Group: ____________________________
Date: ____________________________
Site: ____________________________
Time: ____________________________
# of participants: ____________________________
Others: ____________________________

ON ARRIVAL
- Refreshments available
- Participants to receive and sign consent forms
- Participants to receive money in sealed envelope and sign reimbursement sheet (after the session)
WARM-UP

- Good … (morning/afternoon/evening). My name is Kaoru NOSAKA and I am a PhD student at School of Marketing, Tourism and Leisure, ECU.
- We really thank you for your time and commitment this (morning/afternoon/evening).
- This focus group is with Australian university students aged between 18 and 23 years who were born and raised in Australia and using English at home.
- Your thoughts and experiences are very valuable to this project and there are no right or wrong answers, so don’t be afraid to say something different to everyone else.
- We would like you to feel comfortable about being open in what you say so please agree that what you hear here should not be repeated outside.
- We would like to hear everyone’s thoughts and experiences so please respect other people’s opinions and share the time.
- As you know we are audio-taping for the sessions, but it only to listen to later for research purposes.
- Unless you may be needed urgently, please can you turn off your mobile phones so we are not interrupted?

OUTLINE OF THE SESSION

- We will have a discussion about an hour.
- Please feel free to talk to each other.
- Now we will start with a couple of questions. Please jot down your first response on the paper in front of you.

******************************************************************************

!! OBJECTIVES !!

1. Explore the role of readiness to accept social marketing activities in accepting or rejecting social marketing messages
2. Explore key elements in operationalising a concept of readiness to accept government sponsored social marketing activities
3. Explore values related to the freedom of the individual

INTERVIEW QUESTIONS

Q1: In some countries, governments have intervened in reuse and recycling issues more than Australia has. Please write down your first response towards the idea of governments being involved in an issue like this (ask the participants to draw a line).

Q2: This is a “Reuse, Reduce, Recycle” poster. Please write down your first impressions, words, or pictures towards this poster (ask the participants to draw a line).

Q3: Can you think of any other marketing campaigns around social issues, health issues or safety? Please write down whatever you come up with (if necessary, supply some example).

End of pen and paper

Q4: What campaigns did you write down? Who would like to start?

Probes: How did you know these campaigns?
What do you think about these campaigns first?
Who do you think paid for these campaigns?
How do you feel about commercial marketing in general?
Is there any difference in the way of feeling about commercial marketing and social marketing campaigns?

□ Issue
□ Message
□ Sponsor
□ Marketing
Q5: What do you think about the “Reuse, Reduce, Recycle” poster?

Probes: Who do you think paid for this campaign?
Are you accepting or rejecting being told what to do with environmental issues by the government?

Why? or Why not?

☐ Issue
☐ Message
☐ Sponsor
☐ Money

* Brief explanation of the concepts of freedom and harmony to the participants

** Play ‘devil’s advocate’ here

☐ Government involvement
☐ Money
☐ Values related to freedom

Q6: What do you think about government interventions in activities for solving social issues?

Probes: Should government be involved in activities for solving social issues?

If “Yes”
What should they do?

If “No”
Why not? Who should be responsible?

Q7: Are individual rights greater than the rights of society?

Probes: How important is a concept of individual freedom to you?
How important is a concept of social harmony or social cooperation to you?

Q8: Does anyone have any other comments?

****************************************************************

CLOSURE

That’s the end of the interview. Thank you very much for your help. If you have any questions or concerns, please feel free to contact me or my supervisor.
Appendix 4B Interview Protocol (Japanese Version)


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Interview Protocol (Japanese version: 日本語版)
Kaoru NOSAKA
School of Marketing, Tourism and Leisure
Faculty of Business and Law
Edith Cowan University

主題: 社会問題解決方策・活動に対する意見 (例 “Reuse, Reduce, Recycle”)

グループ: ______________________
日付: ______________________
会場: ______________________
時間: ______________________
参加者数: ______________________
その他: ______________________

参加者入室時
飲み物提供
同意書配布・収集
インタビュー終了後、封筒入り商品券を参加者に手渡し、中身を確認後参加費受取書にサインをしてもらう

参加者入室時
ウォーミングアップ

皆さん（お早うございます/今日は/今晩は）。私は野坂薰と申します。私は現在、西オーストラリア州立イーディスコーワン大学で博士課程を修めております。

本日は、お忙しい中、本研究に参加頂き大変感謝しております。

本日のフォーカスグループインタビューは、18歳から23歳の日本人大学生に参加いただいております。

皆様のご意見・ご経験はすべて本研究にとって有益なものであり、正解・不正解を問うものではない。従いまして、他の参加者の方と意見が異なっても、遠慮することなく是非ご発言下さい。また、一般的なご意見ではなく、是非皆様個人のご意見を述べてください。

参加されている方全員が個人の意見を述べやすい雰囲気にするため、これからのインタビューで見聞きしたことは外部に絶対漏らさないよう、事前にお約束下さい。

出来る限り皆様全員のご意見を伺いたいため、どうか他の方の意見を尊重するとともに、全員が発言できるようお互いに配慮いただくようお願いいたします。

研究内容説明書にございますように、インタビュー内容をデジタルボイスレコーダーにて録音させていただきます。録音された内容は研究目的にのみ利用するものであり、他の目的には利用いたしません。

インタビューが途中で中断されないよう、緊急の呼び出しが予定されている場合を除き、携帯電話の電源をお切りいただくか、マナーモードに設定していただくようお願いいたします。

インタビューの概要

本インタビューの所要時間は約1時間を予定しております。

dou zou lai kusu shite te no tate to hou ka sa ii sa i.

で は、 簡 単な質問から始めさせていただきます。質問を聞いて、まず初に思ったこと、感じたことを皆様の前に用意してある用紙にお書き下さい。

**************************************************************************

!! インタビュー目的!!

1. Explore the role of readiness to accept social marketing activities in accepting or rejecting social marketing messages
2. Explore key elements in operationalising a concept of readiness to accept government sponsored social marketing messages
3. Explore values related to the freedom of the individual

質問

Q1: オーストラリアなど他の国に比べ、日本では政府による3R問題への介入の度合いが高い。この様に政府がより社会問題の解決方策・活動へ介入することをどう思われますか。

Q2: これは3R（Reuse, Reduce, Recycle）のポスターです。このポスターに対する第一印象を言葉や絵などで表してください。

Q3: 3R以外に社会問題の解決方策・活動をご存知ですか。キャンペーンの名前などをお書き下さい。 （必要時には例を挙げる）

答えを書いていただく質問はこれで終わります

**************************************************************************
Q4: どのようなキャンペーンや活動をお書きになりましたか？

Probes: どのようにそのキャンペーンをお知りになりましたか？
そのキャンペーンについて、あなたの最初の反応はどのようなものでしたか？
キャンペーンに必要なお金はだれが支払っていると思いますか？
一般のマーケティング活動についてどのように思いますか？
一般のマーケティング活動と社会問題に関するマーケティング活動に対して異なるご意見をお持ちですか？

□社会問題
□メッセージ
□スポンサー
□マーケティング

Q5: ３Ｒのポスターについてどう思われますか？

Probes: このキャンペーンの資金は誰が支払っていると思いますか？
このポスターはあなたの行動に影響を与えると思いますか？
それはなぜですか？またどのようにですか？

□ ３Ｒ
□メッセージ
□スポンサー
□金銭

Q6: 政府による社会問題への介入をどのように思われますか？

Probes: どの程度そう思われますか？

Q7: 他に何かご意見はございませんか？

****************************************************************

終了
これでインタビューを終了いたします。他にご意見・ご質問がございま
場合は、遠慮なさらずに私、もしくは指導教官までご連絡ください。本日はご
参加有難うございました。

日本の政府はうまく行っていると思いますか？
自由という概念はあなたにとって重要ですか？
社会の調和はあなたにとって重要ですか？

*欧米における自由の概念を簡単に説明する
**必要時には “あまのじゃく” の意見を投げかける

□ 政府による介入
□ 金銭
□ 自由に関連する価値観
## Appendix 4C First-Level and Pattern Coding of Participants’ Statements

**Note:** SM = social marketing, Gov = Government, 123456 = Australian groups, 78910 = Japanese Groups, ✔ = mentioned in discussion, AF = female Australian, AM = male Australian, JF = female Japanese, JM = male Japanese, [ ] = supplementary explanations by the researcher, * = topics indicated by the moderator to all groups, ** Statements made by Japanese respondents are presented by English translations followed by statements in Japanese in parentheses.

<table>
<thead>
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<th>Pattern codes</th>
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<td><strong>Taxpayers’ money</strong></td>
<td><strong>Taxpayers’ money</strong></td>
<td>-If our tax money doesn’t go into the campaigns, our money’s going to end up in the health system anyway. (AF)</td>
<td>- For example, environmental destruction was partly our fault, so it would be ‘yes’ to spend our money on such a campaign. (JM)  （例えば環境を破壊してしまっているのは自分たちの責任でもあるので、それに税金を使っているのはありだと思います。）</td>
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<td>-Yup umm [And all the more money for me] like the government funding it, I think it’s a pretty good idea I think they could spend it on a lot worse things. I think there [is a market there] for government funding I don’t have a problem with it. I think it’s a good idea. (AM)</td>
<td>- I agree that the Government has made some efforts in its own way, but I am concerned about how our money has been spent by them because we do not know what they are actually doing. (JF)  （政府は政府なりにやっていると思いますが、具体的にどんなことをやっているのかわからないので実際どんな風につかわれているのかという不安はあります。）</td>
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|                | 1 2 3 4 5 6 7 8 9 10 | -I think it’s great because it just means it’s highlighting the awareness of looking after the people. So it’s going to a reasonable cause – it’s not going to be spent on a football stadium or anything like that. It’s actually looking at protecting our actual citizens and so I think it should be um…especially if there’s so many deaths coming out of these, it should be, yeah, more aware of what it’s actually causing. (AF) | - I don’t particularly disagree with that the Government spends taxpayer’s money on such campaigns [ecological campaigns], but I think it has to show us clearly how it spends the money instead. (JM)  （こういうキャンペーンを使うことは特に反対ではないですが、その代わりにこういう風に使っているん）
- Health promotion, yes. Educational. [As an answer towards the question “basically are you all happy with the government spending your tax money for solving social issues?”] (AF)

- Personally, I mean, I’m happy to say that I don’t smoke, I’m not obese and I actually don’t drink alcohol. So to me that’s my money being wasted in a sense because I don’t have any of those problems. So it’s my money being spent on other people, then when you think about it like that, there is a bit of an issue. But having said that, I think it’s important to make these sort of ads, like to present them to people because it is important and it benefits the entire community. (AM)

- I don’t know, when I see ads, I think they’re a good thing, a good tool, but I don’t really think I would pay for them myself. The government does. (AM)

- It’s um, yeah, they think they, if the issues weren’t raised, then a lot of people wouldn’t talk about them. But then I don’t know the exact budget of what a government would spend on an advertising campaign, and if it was a fair bit of money that could be used in a different way, then that should be logically, that that should be used in a good way. But then the government wants to promote itself so they’re always going to do that. It’s very similar to like the adverts that they have on during their election campaigns, they’re just a waste of time as well so I think if they’re doing it on an issue which is very public at the time, then it could have a bigger effect. (AM)
Effectiveness of taxpayers’ money
(opinions about how effective taxpayers’ money is used for Gov’t-sponsored SM activities)

1 2 3 4 5 6 7 8 9 10

-What if told you that it’s actually of economic benefit to allow people to smoke because they’ll die sooner and they won’t clog up the hospitals. If they [the Government] promise not to help them [smokers] hospitals, then yeah. In England, they advertise smoking because it’s taxed so much that the taxes cover their health and others. (AF)

-I think that it’s [spending taxpayers’ money on health issues] important but only if it’s actually working, like if they’re spending all this money on these “Quit” campaigns and it’s not doing anything, then it’s a waste of money. So unless there’s some way, I mean, if they can show that “yes, it’s helping” then it’s worthwhile because obviously millions of people are dying of emphysema and you know. (AM)

-And even from the Work Safe point of view, since they brought in the Work Safe campaign, fatalities in workplaces have actually decreased and so has injuries…So that little bit of money they spent at the beginning is reaping the rewards. (AF)

-I see it as a waste of money, inaccurate, and they don’t do anything. No one listens to them. (AM)

-Even if the Government’s campaign is effective to dome of the generations, I feel I lost my money unless it’s beneficial to all generations. (JF) (他の層には受けても全部の年齢層が良いと思えるようなPRじゃないと私達は損してる、そんな気分になります。)

-As we have not been informed how effective the Government’s campaigns [for solving social issues] are, I have no idea if it is worth spending our money on such campaigns. (JM) (そのキャンペーンでどれだけ効果が出ている、と言う結果は国民がそんなに知らないので、その効果が使ったお金ほどの価値なのかわからない。)

-I guess our money has been wasted, because we don’t know how that money has been used by the Government. (JM) (何に使われているのかわからないので無駄が多いと思います。)

-The quality of the Government’s campaigns is so poor that I put a low value on its capability of financial management (JM) (こんな内容に税金つかっているのか、レベルが低い感じがします。)

-I feel that the Government uses our money arbitrarily, because we have never been informed how effective its social campaigns were. (JF) (そのキャンペーンでどれだけの効果が出ている、と言う結果は国民がそれはほとんど知らないので勝手に使われていると感じます。)
- I guess if you’re telling me it’s not coming from a government dept it makes me think that it may not be true. It’s not as reliable. Not as trustworthy. (AF)

- More trust than if it’s not a government agency I think, I mean just subconsciously I think it’s more of a trustworthy source because you think it’s not money driven it’s there for a reason. (AM)

- I think just the point that the government there is the stated, and the actual company is there to make it aware, like to actually improve, so you’ve stated they actually implement it or something like that, you know. You actually have, companies yeah, they want to sell their product but they’re still making people aware of the actual issue out there. So if you take into consideration, yeah, nicotine, yeah, it’s actually selling its product but it’s actually making you aware that this is a safer way of actually reducing smoking rather than making a law that you just can’t do it. (AF)

- I think it’s better because the government exercises more leadership towards it so you don’t feel like you’re doing it alone, like you’ve got the government behind you so you think it’s probably right to do. That’s my view on it. (AF)

- The government should be a role model to the rest of the population. (AM)

- Yeah, I find that people don’t tend to trust their government when they’re not doing the job as well as
they can. Like if you’re doing a good job, everyone in society is benefiting from that and people are going to trust them. But if they’re screwing up, the public’s not going to like it and they’re not going to trust them. (AM)

-Well, I think it’s different because federal government has nothing to do with this, well that’s my opinion or that’s what I perceive. This is local government and at the end of the day, not many people really listen to local government, they’re just there giving them their bins and picking up their rubbish on a Wednesday morning. So yeah, I think these sort of advertisements from local government are totally ineffective. I don’t think people pay too much attention to them at all. (AM)

-Yeah, I’ve got a bit of resentment [against the Government]. (AM)

Effectiveness of Gov’t SM campaigns
(opinions about effectiveness of Gov’t-sponsored SM campaigns)

1 2 3 4 5 6 7 8 9 10

-Smoking campaigns do seem to be working, also not only smoking campaigns but also fact you can’t smoke in pubs anymore you can’t smoke anywhere anymore, you just don’t see nearly as many people smoke as when... (AM)

-But the thing is the Government will say one thing and the opposition will say another thing, they’re always trying to contradict each other, that’s when it gets annoying (AM).

- It is hard to believe that the Government’s campaigns are effective when I am not even aware that the Government has been involved in social marketing campaigns. (JM) (政府のキャンペーンで行動が

[3Rs (reduce, reuse, recycle) and use of a eco-bag], instead of complaining about them, our tax money will be used more effectively. (JF) (政府がやっていることに文句を言うんじゃないくて、政府がやっていることを自分達も実践すれば税金が無駄にならない。)

- Government-sponsored campaigns [for solving social issues] have never brought my behavioural changes; however, they are worthwhile increasing our awareness of the issues. (JF) (政府のキャンペーンで行動が
Not really. Because most people think the Governments are dickheads, pretty much... Sorry but you kind of just go *shrug*... same old thing [as an answer toward the question “So do you think the way the government social marketing campaigns word their message will influence your behaviour, your attitude?”]. (AM)

-I think they’re going for the shock tactics at the moment, a lot more than the education...and that works to some degree but once you’ve seen the ad a few times, you just switch channels. It’s sort of...I tend to find I don’t want to watch that, I’ll just switch. Like, I understand... (AF)

-I think the government is doing ok actually. They’ve got the ‘anti-hoon’ campaigns, all things that sort of are close to everyone’s heart, like in the neighbourhood. You know, recycling in the neighbourhood, anti-hoons, what else is there, there’s smoking – they’re all kind of trying to better the community, make it more liveable for everyone. (AM)

-I think we’re very well controlled, well not controlled but I mean like, how the government took away smoking in bars and wearing a helmet, wearing a seatbelt and not talking on the phone while driving, not drinking and driving. I think that we’re pretty well looked after by the government in regards to our health and other people’s health at the same time. (AF)

-Oh, look, I, I don’t have any complaints. As long as I’m happy, they’re doing something right, aren’t they? I mean there is obviously, if you read into it, there is some issues but at this point in time they’re doing ok so...

-It looks to me that government-sponsored social campaigns [for solving social issues] are a mere formality, and there is nothing we can actually utilise them. (JM) (政府の取り組みは形式のひとつにしか見えず、国民が実際感じるものはほとんどないと思います。)

-I don’t think government-sponsored social campaigns [for solving social issues] have penetrated into our lives. (JF) (政府のメッセージは浸透していないうちの感じ。)

-Such a bad taste! The Government should use celebrities or brand-name goods for their campaigns [ecological campaigns] to target younger audiences. (JF) (センスが悪い。若い人対象なら有名人つかったり、ブランド物使ったりしたほうがよい。)
I think they should start the base rather than just touching the surface issues. They should actually start making the framework of society better rather than trying to fix the problem at the moment. Like stuff the symptoms, try and treat the cause. (AM)

Um, yeah, well, despite everything that’s been said, I’m pretty happy with the government when you look at other governments around the world. At least ours aren’t killing and racial cleansing. (AM)

Now, it [a green attitude] gets advertised more and more I’m just like, ‘well the world’s gonna die sooner or later anyway—it’s gonna be after I dies’. You can push the whole “the world’s gonna die” a bit too much cause people don’t believe it. (AF)

It’s [having a baby or only having one child] very personal and also massively affects your immediate life. If they tell me to have babies and I didn’t want to have babies that massively affects how I feel about my life and what I’m comfortable with... they are much bigger things and much more personal and they affect you mentally and emotionally more. (AF)

It’s also hard to tell people [that] in 150 years we might have ice age because of the bad things we’ve done to the planet. (AF)

I think it’s (recycling) a good idea but I don’t want someone to tell me what I can do when it comes to my own family so it’s a hardline to draw. (AM)

- Some campaigns like ‘cool-biz’ [one of ecological campaigns advocated by Ministry of Environment in 2005, which advised their people to reduce electronic consumption by lessening usage of air conditioners and by introducing new dress code at work] sound irrelevant to me. In fact, I use an air-conditioner at home while business people turn off it for saving energy. (JF) (クール・ビズなどは会社にいる人だけのイメージがあって自分は家でクーラーで過ごしてしまったりしています。)

- Like a TV commercial, ‘I know it, but do nothing’. It’s just too much trouble to follow recommendations [to use eco-bas instead of plastic bags] unless it’s a matter of life and death. (JF) (CMの「知っているけどしていない」、面倒くさいし命にかかわるわけではないので。)

- Even though I am told that the earth is in danger, it is just too distant to realise that I should change my
- I think it comes down to the immediacy of the outcomes, like with drink driving, if you don’t drink you won’t have an accident, that’s immediate, if you have a kid when does that effect flow though. So take recycling in 100 years the Earth will be gone or whatever they think well it’s not now. (AM)

- Personally, now rather than what’s going to happen in the future and perhaps not even to them [next generations], but even if it is them if it’s 25-50 years away then it’s too far away to think about. (AM)

- …I think when government, local and federal government cross that line and really start to show the hard-hitting facts and what actually really does happen, that is when ads like these [scary ads] will be more effective. I remember a cancer ad of the wife, sorry the lady that was dying, she had the two kids, I remember that ad because that was real… I think those ads are the best because they’re real and they actually touch the audience… (AM)

- I did have one customer through and ask for cigarettes, and it was a guy, and he goes “oh, give me the pregnancy ones [warning messages on the cigarette packet] because they don’t affect me”. So he actually asked for a specific-he’s like “give me the pack with the ‘smoking effects your baby’ because it doesn’t affect me”. (AF)

- They sort of raise an issue like, just because it might not affect me and my area, it might affect other people in other areas. Like if you have some street hoon that always hoons down your street, then you’re not going to want your kids out on the street. But at least it raises issues that are important to other people at different times and stuff, you know, it might make other people think about it, but not necessarily me. (AM)

behaviours when my life is not affected by it. (JF) (地球が危険っていわれても直接かかわらないし、本当に先過ぎて皆でやることが難しい。)

- I think many people probably feel that environmental destruction is not their problem, because it won’t affect them while they are alive. (JM) (自分が生きている間にその問題が自分に関係ない、と感じている人も結構多いと思う。)

- Even though we are told that global warming is taking a turn for the worse, we hear as if it was taking place in another planet. I have doubt that we will be able to change this situation. (JM) (温度化が進んでいる、と言われても、それが私達に何かやってなかった本当にかわるのか、って別の世界で起きている話のようにとらえてしまっている。)

- If I were under the imminent pressure of doing something, I would. (JM) (今必要感がないのであまり思わないですけど、そういうものがあると思うと思います。)

- We often see campaigns [for solving social issues] through TV commercials or news, but they seem irrelevant to our daily lives. In fact, I am more interested in issues that are more strongly associated with my life. (JF) (実生活に活きるほうがやっぱり興味がわきやすい。CMとかニュースとかいくらでもやっているけど、それが実生活にむすびついているかな、っていうとそれはどうかな、って思います。)
Characteristics of outcomes
(opinions about the effects of the characteristics of possible outcomes)

- Kids in Indonesia are picking through the rubbish dumps to get food; mountains and mountains of rubbish and I think, why am I recycling when they’re just dumping it in the ocean? (AF)

- Quitting smoking, finding 30 minutes of exercise a day and recycling doesn’t just help you, it helps everybody. Recycling for obvious reasons, it helps the planet and all the rest of it… Where having babies is…I mean who does that help? I don’t see that being as something you do for the benefit of the country or for the planet. You do it for the benefit of yourself and your partner, perhaps for your family as well. (AF)

- It’s the outcome though—don’t smoke or you’ll die, exercise or you’ll die, stop drink driving or someone else will dies, have kids…or what? (AM)

- If they are encouraging us to have more kids so we can do a quick fix for this rapidly aging population, which is going to go away one way or another, I don’t think it’s go away in the short term, it’s just going to have to wait it out until it balances out. So it’s kind of like, why the hell are you guys doing this. Another interesting topic. (AM)

- It’s [the impact of speeding] not only the cost in money, it’s the cost in life as well. Like, you life someone to drink driving and it’s devastating, it’s absolutely… (AF)

- With that helmet thing [wearing helmet on a bike]. If someone runs into you with their car and they will kill you, can you just imagine what they’d be feeling for the rest of their life? (AF)

- For me it has a much bigger impact on your life, having a child, than recycling. Recycling is something that you’re probably going to do anyway at some stage in your life. (AF)

- As a man sows, so shall he reap, we have to solve the social problems no matter what results might be, because we were the cause of many social issues. (JF)

- Each individual has too small power to achieve the goals [of ecological campaigns]. I doubt my use of eco-bag can have any impact on this issue [to stop environmental destruction]. (JF) (一人ひとりが小さすぎて、私一人くらいがエコバッグ使っても効果がないと思えてしまいます。)

- I prefer the idea of segregation for smokers rather than anti-smoking campaigns. Anti-smoking campaigns could affect the Japanese economy as those would exclude smokers from bars, for example, and this would hurt some businesses. It is quite difficult to keep a good balance between solving social issues and a stable economy. (JM)（分煙ですめばそれで。禁煙だとバーなど来る人が少なくなり廃業するところも多くなると思うんです。経済活動ってことでも難しいバランスです。）

- The necessity of seat belt in a car is quite understandable, because the relationship between the seat belts and fatal accidents has been proved. However, for recycling, for example, I don’t realise that recycling can really save the earth. (JM)（シートベルトなどは死亡事故などの関係でその安全性がわかっているからしなきゃいけない、と思いますが、ごみなどに関しては実感がありません。）
I hear global warming has been progressing, but I have a doubt that recycling has an impact on that issue. (JM)
(温暖化が進んでると言われても、自分たちがリサイクルをやったら本当にそれでかわるのかって。)

It is easy for me to initiate recommended behaviours when I see the immediate results. (JF) (すぐにいう効果があるよ、というほうが取り組みやすい。)

I suppose the eco-move is a good concept that is accepted by the general population, but the idea of having an only child is debatable. (JF) (エコはいいことじゃないですか、基本的に。いいことというのは皆が共通して持っている概念で、でも一人っ子などはいいと思う人とだめと思う人がいると思います。)

Motivation
(opinions about Gov’t’s motivations to be involved in SM activities)

1 2 3 4 5 6 7 8 9 10

- I’d think why is it telling me not to chew gum because in Singapore it’s illegal to chew gum and that’s why they don’t do it. But here you’d kind of go ‘what’s the point?’ It’d depend on the message of why, I think. (AF)

- So one’s [a private enterprise] money driven and the others [the Government] more lifestyle, so the motives behind the two, I think, are different. (AM)

- I don’t always agree that the Government has our best interests at heart. They have their own agenda. (AM)

- I was going to say, I think it’s great because it just means

- With the heavier tax, tobacco sales may have declined; however, the revenue from the sales has been maintained. The Government wants to keep the health care cost down but wants to secure its revenue. Isn’t this picture wrong? (JF)（タバコの値段が上がって買う人が少なくななくてもタバコ税からの収入は変わらない。結局収入目的でタバコを売っている、ってことですよね。医療費を抑えたいけどお金も欲しい、なんかおかしくない？）

- As long as the final goal of the campaigns is to reduce medical costs, anti-smoking campaigns would be fine for me. (JM)（最終目的が医療費削減の達成であ
it’s highlighting the awareness of looking after the
people. (AF)

- Yeah, I reckon it’s paramount because basically having
a good environment leads to a good community, good
atmosphere, and a well-run country that is economic
suitable for it. It’s a good start. It’s costing less to keep
the environment than it is to fix it. (AM)

-I guess it seems to be that they need to use these
campaigns in order to show the public that they’re
actually doing something, because if they didn’t have
those campaigns, they could do everything they could
do, as you say, fix up all the power grids and save water,
whatever, but the public won’t know about that. So
when it comes to election time then they’re going to
think they’ve done nothing and then they don’t get
re-elected. (AM)

-I think it’s important to understand the motives behind
what they’re doing. So if they’re saying we’re going
to put money into this to help stop the trees from dying out
but then don’t face the issues, I don’t know, like
McDonalds for instance, putting money into programs
but not facing the problems of health amongst people. I
think you have to be aware of why they want to put
money in and to just do it to give themselves some
positive publicity, then I think you ought to be aware of
it. (AM)

-I think if the government can sort of justify, well, the
answers, the why they do stuff, I think they should be
allowed to but if they’re just doing it because there’s a

- In order to keep a social balance, it is necessary for the
Government to take part in the activities [for solving
social issues] which may involve personal matters.
(JM) (社会のバランスを取るためにあれば個人
にかかわることでもそこを規制するのは必要だと
思います。)

- In my experience as an international student delegate to
Europe, I found that their governments’ intensions were
clearly demonstrated in people’s lives. For example,
people seemed to understand they were paying heavy
taxes, which eventually contributed to the welfare of
people. (JF) (昔海外派遣でヨーロッパに行った
ときに思ったのですが、政府の意図がしっかり自
分たちの実生活に活きていました。税金が高い分、
政府の意図としてその分福祉に当てられている、
っていうのが誰もが見てわかるくらいでした。で
すから、人々も税金高いのは当たり前だし、それ
は後々自分たちの生活に活きてくるものだという
意識が組み込まれている感じでした。)
rule there and they just want to make a rule there, I don’t think it’s appropriate. But there’s generally a reason for the rule and as long as they sort of explain it to you – like we don’t want kids driving fast cars because there’s such a high toll rate. (AM)

-I guess if you’re telling me it’s not coming from a government dept it makes me think that it may not be true. It’s not as reliable. Not as trustworthy. (AF)

-I feel flooded by advertising generally but I don’t specifically feel the government takes up a large proportion of that, I think most of it is from private companies. And admittedly while I do see a lot I see a lot more of other things which I think are less important. (AF)

-If it was about how you could recycle things then I think that would be good because it makes you feel like you can actually do something rather than just saying ‘did you know these things could be recycled’ and not giving you any further information. (AF)

-Promote healthy alternatives maybe, more true information, not so this force them to do it, may give them healthier alternatives, so instead of just you have to do this, give them ideas like “what, how they can do it, instead of do this, do this” give them alternatives. (AM)

-I think we [Australians] are very objective, there has to be strength behind their message. We want reasons. You - The information about ‘cool-biz’ [one of ecological campaigns advocated by the Japanese Ministry of Environment in 2005, which advised their people to reduce electronic consumption by less usage of air conditioners and by introducing new dress-code at work] seems to be targeted to the only people who work in the offices; therefore, I don’t think this [ecological] message has penetrated the rest of us. (JF) (実際、クールビズは会社にいる人だけのイメージがあって、浸透し切れていない気がします。)

-I don’t see any problems for the Government to present the details of social issues, because the decisions as to whether we choose to change our behaviours still lie with us. (JM) (社会の問題について提示するだけ提示するのは、変わる人がいればそれに越したことはないし、いやと思えばその人の考え方やらなければならない話なんで問題ないと思います。)

- It is easier for us to make behavioural change if the Government presents us with more practical alternatives in order to achieve the social campaigns goals, such as the use of eco-bags for 3Rs campaign. (JF) （例えば、これだったらエコバッグを使うというような国民ができる具体的なことを提示していったらわかりやすいと思います。）
don’t have to agree with the majority, you get that with multiculturalism I think. (AM)

-Because the biggest thing would be sort of, especially the disease ones and the waste management, is basically education. Most people don’t know and then as soon as they do know they take action. But there’s a big part of the campaigns, just to educate which I think is important. (AF)

-I think the problem is all the campaigns are very similar in the way that they’re doing it. Like there’s the ones with the ‘children see and children do’ about watching their father beat their mother or they’re watching their father drink and they pick up those habits. They watch, you know… And they’re all very similar so they sort of meld into one. (AF)

-I definitely think people need to be informed, you know, again, why, you know, to actually recycle – and over here you’ve got the little pie graph saying what it’s used for. I mean, a lot of people say, “why should I recycle this, you know, ten gram water bottle or something, you know.” It paints a bigger picture for like these small things that are frivolous to us and we just throw out because we can’t be bothered recycling them. (AF)

-Yeah, I reckon it’s their responsibility to educate the public. (AM)

-Yeah, I think they’re good to have but I don’t know how effective they are and I reckon there’s definitely, there’s definitely a good reason for spending the money on it but - I think that the first priority is to make people understand what is happening [around a social issue]. Nobody would agree with performing recommended behaviours if the Government merely tells us to do this and that without explaining the situation. For example, to the smokers, they first have to understand the effects of smoking before quitting. (JM) (今の現状をしっかり解させることが大事じゃないかと。その手順を省いてあーしなさい、こーしなさいっていわれても多分誰もわからないと思います。タバコを吸うとかこんなことがあるんですよ、とかもっともっと理解されることがまず最初に必要じゃないでしょうか。)

- If the Government one-sidedly tells smokers to quit smoking, it would face a great antipathy from the smokers, saying why we have to listen to you. So I think that the Government should focus on why people start smoking rather than on changing the aftermath, smoking for example here. If the Government finds causes, it could change the results. (JM) (タバコをやめろと一方的にいっても「何でお前のいうこと聞かなきゃいけないんだ」ってなる。結果をどうにかするのでではなく、まず、何でそうなるのかと言う原因を突き止めないと結果は解決しない。結果をどうにかしなければいけないんだから原因をどうにかすれば結果につながってくると思います。)

- It would really depend on individuals, but personally, I tend to accept recommended behaviours if I am well-informed about the issue. (JM) (人によってだとは思いますが、自分の場合はいろんなデータと
whether it’s the best way of spending the money on it just making ads or whether it should be more informational.

(AM)

-I think they should start the base rather than just touching the surface issues. They should actually start making the framework of society better rather than trying to fix the problem at the moment. Like stuff the symptoms, try and treat the cause. (AM)

-It is more likely that people respond well to a message if presented in a conscientious manner, I think. (JM) (道徳的に訴えかけなければ悪いことをしないのでそっちに訴えかけることが必要だと思う。)

- Although social issues are often raised on TV news, I have difficulty grasping the centres of the issues when the existent circumstances and concrete measures to address these issues are not presented clearly. (JF) (ニュースなどでも結構社会問題はピックアップされるも、実際取り巻く環境やそれを支える政策が具体的に伝わってこないから問題が捉えるにくいて感じる。)

- The Government always adopts scare tactics by saying if you don’t do what we tell you to do, something dreadful will occur. (JF) (やらないと悪いことが起きる、と言う言い方ばかり。)

- If smoking areas are established effectively, smokers can just go there, so others are not harmed by second-hand smoke. Furthermore, the Government can still collect tobacco-related taxes. I think that would be no problem. (JM) (喫煙所って言うのをしっかり設ければ、吸いたい人は近くに喫煙所さえあればそこへ行って吸って、出てくるので周りの人に煙が行って害があるわけでもないし、その人もすすぐし、それでタバコの税金もそのまま取り続けられるので問題ないかと思います。)

-Promotion

**Ability**
(opinions about skills and facilities to perform or not, recommended behaviours)

1 2 3 4 5 6 7 8 9 10

-I liked it. I like the idea of not having to go to gym to stay healthy. I can do 30 minutes! (AF)

-If it was about how you could recycle things then I think that would be good because it makes you feel like you can actually do something rather than just saying ‘did you know these things could be recycled’ and not giving you any further information. I think if it actually tells you how you can do things in an everyday sense then I think it’d be good. Otherwise it can be frustrating like you were saying with the recycling thing. You feel like...
should be able to do something but you’re not sure how.

(AF)

-Promote healthy alternatives maybe, more true information, not so this force them to do it, may give them healthier alternatives, so instead of just you have to do this, give them ideas like “what, how they can do it, instead of do this, do this” give them alternatives.

(AM)

-It’s like the Quit Line one as well, like they’re more encouraging them that, you know, if they need help, you know, and it’s anonymous and things like that. So instead of ‘you should stop’ and getting their backs up, they do it more gently and people are more responsive to that. (AF)

-I find that when I was share-housing about three years ago, we had two recycle bins right next to our normal bin and we used them, we used them more than the normal bin. Like anything we could recycle, we recycled, no worries. We don’t have access to that where I am now, so I just don’t do it. I think if the government supplied the bins and it’s a convenient sort of thing, if you’ve got it there, you’ll use it, but you won’t go to the trouble of organising it yourself. So I think that’s the biggest difference with the recycling campaign. (AF)

Easiness to execute

- The fact they advertise it and don’t make it easy to do it. Or, not that it’s not easy but they attach something to it.

- I know it is important to adapt our behaviours, but it is
It’s like we’ll recycle this and we’ll encourage you to do this but, you know, we want you all to use halogen globes but we’re going to charge you double the amount to buy them. (AF)

- They already have rules with the recycle bin like you’re meant to wash out your milk cartons but I find it too hard, I mean if you finish your milk you’re not going to wash it out. So I just chuck mine in with the other rubbish now, I’m pretty lazy eh? (AM)

- You can stop drink driving – it’s easy, you can stop speeding easy, you can stop anti-smoking relatively easy but kids [having more kids], they’re there for life, so big commitment, there’s a bit of a difference. (AM)

- We’ve got a bin at home and my parents have one that’s actually divided in two, so they’ve got paper and they’ve got plastic on the other side. I actually found it more annoying because you had to separate it, whereas our recycling bin at home, it has a list of stuff on the lid and you just chuck everything in there. So I actually go through our house and I will have a rubbish bag and I will have a recycling bag and it’s totally easy. But when you’re out, it does make it hard. Like I went to the Royal Show and they actually have recycling bins and they have them right next to the general waste. That is good. I like that. But having them separated, it’s like well I don’t want to have to carry an extra 100 metres so I’m just going to dump it here. (AF)

- I think convenience is the biggest thing to do with recycling. (AF)
I think you try and help society but there’s only so much...because everyone’s busy, and you want to do the right thing and you want to try and help but ultimately it’s going to be last on your ‘to do’ list, really, unless you’re really focused on that cause for any reason. (AF)

-We’ve sorted all the rubbish and it’s like five minutes, we’ve sorted all the rubbish out of those bins and we found that even though it’s got the signs and stuff, people still chuck in food and stuff, and once you do that, there’s so much energy that needs to go in to get that food out of the cans and all that, so that they can recycled. So it still doesn’t work. People don’t care, they just chuck it in wherever and like the normal bin which is just next to the recycle, is full of cans and glass bottles. (AM)

-So it [using a recycling bag] was more of a hassle. So they [the local government] actually made it easier for us by giving us the yellow bins which got us recycling more. (AM)

Environment
(opinions about effects of participants’ environment on performing or not,

-...like I was saying – give me the bin. Advertise it, give me the bin, I’ll do it. Don’t advertise it and fine me when you don’t make it easy for me to do. (AF)

-It’s harder to do it than not to do it. The university here is really good because it’s got the recycle bins, but it only has the recycle bins or the normal bins. You don’t

- If the Government also takes women’s lifestyles or life stages into account as one of the reasons of a decrease in the number of children, and support them, I would consider having a child. （JF）（女性のライフスタイルが、ライフステージがこういう風に変わってきた結果、子供が少なくわたった、と言うこともあ
I prefer to be chucking out more of the recycling, like recycling rather than putting everything into the landfill bin. Just to say if I put a phone book in my normal bin, because there was no room in my recycle bag, I would be really annoyed with myself because… (AF)

-I live in the City of Wanneroo and we’ve just recently received the recycling bins as well as the standard bins. I think if, and this comes down to local government more than anything, if local government presents the community with necessary steps and actual physical items such as recycling bins, people will use them. (AM)

-A think actually giving, instead of, I think government can utilise the money much better by actually giving people the recycling bin rather than telling them to recycle. Like if you give someone a bin, that’s a physical incentive to recycle as opposed to this – like no-one reads these sort of things [recycling posters and messages on them] anyway so they look at the title and go ‘whoopy-do’ and put it back down. If you dump a bin on their front lawn and say use it, people will use it. (AM)

-We could not have more children unless the Government maintains infrastructures such as day care centres and appropriate facilities for raising kids. (JM)

-It is quite important to maintain appropriate environment to put a plan in practice, isn’t it? For example, when we think about measures against a decline in the number of children, maintaining environment comes to a matter. (JF)

-Hedonism

-A ban on drinking would be unwelcome measures for me, because I love drinking. (JF)
The only time I don’t see a benefit is when there’s a double negative with it. I’ve just moved into a new house and I had to phone the council and order a bin – you have to pay for a recycling bin. I can understand normal bins having a fee but for something like a recycle bin where there are these campaigns out there where the government’s saying you need to do this and then you phone up and have to pay however much it is. And it’s not cheap it like $10 a week for a recycle bin – I think it’s disgusting. (AF)

-Probably not going to have any more than 3 because as soon as you have more than 3 kids you need another car, you need a 5 bedroom house, you need 5 times the school fees. If petrol is $1.50 a litre now, by the time I have kids in 6 years it’s going to be $6.50 a litre. And to run 2 cars you’re spending like, you know. I’ll just stick to my one kid I can drag on the train. (AF)

-You have to give them incentives to do it as well, like if you brought it into the workplace, for example one hour

- I would behave as recommended if I will benefit from doing so. We Japanese demand benefits. We do not like losses. (JF) (自分に利益があればやりますよね。日本人は利益を求めます。損はしたくない。)

- I really want to see some kind of return for adapting my behaviours, so the Government should begin a campaign providing us some type of rewards to raise public awareness of that issue. For example, money-back or reward points for not using plastic bags would be a good idea. In fact, without any benefits, it is quite difficult to take an action. (JF) （何か返して欲しいので、例えばスーパーでやっているみたいに袋に入れませんと言ったら何ポイントとか、何円券とか、そういう風に返ってくるようなキャンペーンをして、それで意識付けをすることからはじめないと行動にはなかなか移せないと思います。）

- I want to see some kind of reward even for a small effort. (JM) （少しのことをやっても自分に返ってくる、目に見えないものが返ってくる、という
per day, obviously you cannot force them to do it, but if you give them incentives, it would encourage them to do it. So giving them the knowledge should benefit them, and help perspectives yes, but some people need more sort of extrinsic motivation to do it. (AM)

-I think the other issue is the cost. Like for example, the low energy bulbs – we use them but they cost triple than normal ones and I think if they were subsidised they would be used way more. (AF)

-...anyone will do something if it’s free and it’s convenient, they’ll do it, they’ll do the right thing. (AF)

-I think, I think, I mean, kids are a joy aren’t they, they’re meant to be so if you can afford to have more kids, why not, that’s just, I don’t know, that’s my opinion anyway. (AM)

-After all, everyone thinks himself or herself first so far. I have not seen any benefits from the campaigns. (JM)

-The Government should emphasise the merits of recommended behaviours. If people became more aware of the merits in their own backyards, they will probably perform as recommended, I think. (JM)

-I cannot see any coolness in this poster. (JM)

-When I saw a register put all the stuff in an eco-bag and zipped it up, and a woman shouldered the bag and left the shop, I couldn’t help saying ‘cool!”. (JF)

-I joined a cleaning campaign before, because it was accompanied by events such as a concert and festival. (JF)

-I think it is cool to carry ‘my chopsticks’ for eating out, instead of using disposable wooden chopsticks. (JF)
- I’ve seen that ad [Safe Sex campaign] quite a lot recently on TV and it’s very “in your face”… I find with a lot of these campaigns [Safe Sex campaign] there are confronting and they can be intrusive. And they do show at times that – you can tell that they’re trying to reach the large population hopefully get parents to talk to kids etc. (AF)

- It’s like we’ll [the Government] recycle this and we’ll encourage you to do this but, you know, we want you all to use halogen globes but we’re going to charge you double the amount to buy them. We’re going to flood your TV with “you should buy these light globes and you should do this and you should do that” and then when you go to the shop you pay twice as much as anything else. (AF)

- I think as long as they don’t go too far and start trying to control everything we do, it’s fine. But if in the social context of ‘you need to know this, this is education,’ and obviously laws behind the really dangerous ones. (AF)

- Well, we don’t want an authoritarian government. We don’t want… (AF)

- I guess it’s kind of like the watering, the watering is great, it’s when it goes down and you have the people
come back and say, “look, I told you, you should have just watered on this day,” and like it takes into consideration some of the affects of how far they’re going to go, so that they actually over-control everyone. (AF)

-A lot of smokers just, they sort of go, “alright, I’ll take the chance, I don’t really care.” And they’re not going to be swayed. I think they even get more angry when people try and change their mind. Like usually if you’re with a smoker and they start smoking and you go, “oh, that’s such bad habit rah rah they’re more likely to go, “Shut up I’m not going to listen to you” and they’ll keep doing it to spite you sort of thing. (AF)

-it’s actually restricting – again what we said, we don’t want the government to restrict our choice, but you can encourage people to have[kids]…But if the government said, “you have to have three children” or something, then we’d be upset. But if it was open-ended in saying, “we should have more kids” it’s like, well, it’s my choice still. Where the one child policy is I’m being told that’s what it is and I don’t like that so… (AF)

-If they suggest it, like if they say, ‘Australia needs a bigger population’ that’s one thing. For them to tell me I have to, that is overstepping the boundaries of what they should be doing. (AF)

-I think the way that Australians are in comparison to other countries, we’re much more laissez faire, like we’re laid back and if you’re told to do something, you often take it in and then you respond, whether it’s in
violence or, you know what I mean… Sort having said that, I think it wouldn’t work if the government tried to over-control society. I just think it would cause massive havoc. I mean having said that, in countries like Japan what not, where the government is far more in control, people are accustomed to that and they get used to it and they do it. So, yeah, I think if that happened in Australia, there would be trouble. (AM)

-Particularly with smoking, smoke is really interesting, um, environment to it, basically because it’s seen as bad now. The media has led the witch hunt, the governments are going against it and stuff like that. It’s a bit interesting because they can go a bit over the top, I reckon, with it. I reckon they could just basically make sure that we know and that’s it, and not try and convince us otherwise. (AM)

-It’s alright to be given the information but when you’re actually told ‘this is what you will do’ is, I don’t know, people tend to rebel against that sort of thing. (AM)

-Dictatorship-style [comparison to the Singapore and Chinese government]. (AM)

-I think it [whether the Government should control their people or not] depends on the issue, if it’s going to be directly affecting people’s lives, then yes, but I don’t think they should be involved to the level of dictating to people. They should advise and try to change perceptions and perspectives on the issue. (AM)
Social norms
(opinions about effects of social norms on performing or not, recommended behaviours)

1 2 3 4 5 6 7 8 9 10

- There’s a lot of negative about recycling that gets pushed on us. I grew up in a very greeny family. They’re vegetarians. They only eat organic food. We have our own free range chickens because they refuse to buy caged eggs. Recycle ridiculously. Like in every workplace that my mum’s ever worked they’ve set up recycling; battery recycling, mobile phone recycling, like everything. And that’s fine and that brought me up with a really green attitude. (AF)

- From my point of view I think it more that my perceptions aren’t really altered from a marketing campaign it’s more due to my peers, family, and they dictate more of what I think about things or my perception of things more so than a Government ad. Although they might plant the seed, they might get you thinking about it, you’re more so generally influenced by peers and family rather than the government. (AM)

- It makes me angry because if, you know, we can do the right thing, like why can’t someone else do the right thing. (AF)

- Yeah, it’s a community effort and I’ll say it’s not for the individual, it’s for the community to do, for the whole… (AM)

Regulations
(opinions about Govt’s regulative)

- If they [the Government] were going to fine you for not having a child that would be a different matter but I think environmental things need to be a bit more policed. I think they do need to have fines because

- I am rather worried about what people think. (JF) (私は結構人の目も気にしちゃいます。)

- I do as recommended because if I don’t do so, I will feel deviating from a circle of Japanese society and left out. (JF) (やんなきゃ日本人の輪からぞぐれるって言うかみんなと違うっていうか、やんなきゃ取り残される、と感じるとやります。)

- Not everyone who uses eco-bags has an ecological intention. I believe some people carry them because of the cute design. In my case, I do it trying not to get scolded by my mother. (JF) (やっていることが本来の目的を意図してやってるわけではないじゃない？エコバッグ持ってるのはだってエコやるからやっているわけではない。そう、可愛いから持ってるとか。私はお母さんに怒られるからやってるんだよ。)

- Influences by others and society are huge on me. (JF) (周りからの影響が大きいんやね。)
approaches) 

otherwise people won’t do them because people are lazy and it’s something that needs to be done. (AF) 

- Smoking campaigns do seem to be working, also not only smoking campaigns but also fact you can’t smoke in pubs anymore you can’t smoke anywhere anymore, you just don’t see nearly as many people smoke as when... (AM) 

Yeah but that’s different though that’s not like a campaign (AM) 

It is really a campaign (AM) 

Well they’re not spending money to say you can’t smoke in pubs it’s just a law. (AM) 

-Because I’m guessing the laws would be more lenient if you did get caught. I’m sure they wouldn’t be a serious as the repercussions would be in Singapore. People are breaking laws here. (AM) 

-I think you’d find you’d listen to it because if it’s the Government and they’re making it law then you know it must be a last resort and you’d stop and take notice and think “Wow this must really be a problem” (AM) 

-I think it’s also the government having an input by the rules and regulations that are actually stated from work safety as well. Which has had a large impact that you know, you do get a fine. This is very, very big and it’s got out. For smaller companies, it’s going to have a straight impact on them, whether they actually stay in think. (JF) (日本人はやらざるを得ない環境を作られればいいんだと思う。優しく言われるんじゃなくて。政府が国民の顔色を伺いすぎ。) 

- We are Japanese who cannot say ‘No’. (JF) (NOと言えない日本人。) 

- I would do as recommended if there are some kinds of rules like laws. (JF) (法律じゃないんですけど、なんか決められたものがあればやる、と言うのはあります。) 

- I will behave as recommended if I have no choice but do so. (JF) (やらなきゃいけない状況になったらやります。) 

- As we cannot do anything about a consumption tax increase, we are under the situation where we just have to follow orders. (JF) (消費税が高くなるのも私たちがどうにか言ってもどうにかなるものでもないし、結局はなかったものに従うしかないと言う状況だと思います。) 

- I think a campaign alone is not effective enough to change my behaviours, but regulations would probably force me to do so. (JM) (キャンペーンだけやられてもそんなに意識が変わってるっていう感じはないので、規制とかされないとどうしてもできないと言う感じがあります。) 

- It is only commonsense to have good manners, isn’t it? Do we live in such a country where the Government has to intervene in those kinds of matters? (JM) (マナ
business or go out of business due to one little safety issue. The larger organisations, yeah, they can dismiss it but still they are getting a fine and there's also the reputation that it brings to that company that does actually affect them as well. So it is having a large impact with the government actually putting money into educating but also bracing it by the laws and the regulations that actually are supposed to... (AF)

-I have a lot of respect for those Asian cultures that have a lot of the rules put in place but I don’t think I could live there. I think it’s a really good idea, I think it’s a... but people are too individual and especially in Australia with our multiculturalism, if you tried to do that, it just wouldn’t mesh. (AF)

-Yeah, more an education thing rather than an actual rule – sort of educate the people and give them the options to choose. (AF)

-Um, well it’s the law and if you get fined, you’ll be spewing, I’d be like spewing if I got a $100/$50 fine for not wearing my helmet. (AM)

-Yeah, it’s [a regulation] necessary, without government and without police enforcing the law, it would probably be a madhouse. (AM)

-And I think, getting back to that, it all comes back to money in the end, um... The government is a money-making machine but they’re also a money-spending machine and they need these sort of rules and laws to make money so...and people avoid
breaking such laws in fear of coughing up more cash. It’s like speeding, a lot of people speed but the majority of people don’t speed because they can’t afford to pay the fine. So at the end of the day, it comes down to money and that comes down to how much it actually costs you to break the law. (AM)

- You need to be able to express yourself and you have to be able to do what you want but again, the law will always prevail, so you can only go as far as the law unless you want to end up in jail. (AM)

- I think if it’s like, if they’re trying to target things where stuff that people do affect other people in the community, then that’s fine because everyone has a right to live in the community and be treated the same. So if, like say someone’s going to do something that affects other people, they need to be regulated because they can’t get away with ruining other people’s lives just because they want to do something. (AM)

- Do you both trust the government? [Moderator’s question] Yes (AF)

- For the things [the Government’s general activities] that I believe, yes. Things like exercise and reducing health and anything like that but other stuff I’d rather keep my money. (AM)

- Do you all trust the government? [Moderator’s question] No, not for a second. (AF)

- Government’s presence is very remote from our lives. (JF) （遠い存在ですよ。）

- It’s hard to place trust in the Government when the high-ranking government officials are doing as they please with our money. I watched TV news in which a governor was telling Japanese athletes at the Olympic inaugural assembly ‘You’d better do the bet as you owe us’. (JF) （この間オリンピックの結団式のニュースが流れていて、政府の誰かが「国費を使ってい

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**General attitudes toward Government**

( general opinions about Government)

1 2 3 4 5 6 7 8 9 10
I think all you have to do is look at elections. One will tell you one thing, the other will tell you the exact opposite – and it’s whichever one you believe, you’re going to vote into power. It’s a case of they’re trying to convince you one thing just so that they can get that power and I think it continues the whole way through – once they’re in they’re trying to continue to manipulate you to, so that they stay in, and I think it’s more to do with power than to do with educating instances…you had to read between the lines and you have to have some background understanding before you could listen to anything that they really said. (AF)

-I think that the Australian Government has proved time and time again that they really do have both the individual and the country at heart, like they look after both, just like through everything they do, you can always see the benefits of both or they balance it out. (AF)

-I probably do trust the government because at the end of the day, I have a roof over my head and I live in a damn safe country, in my mind. So yeah, I do trust the government but having said that, I don’t trust some of the minority, the law enforcers such as the police … (AF)

-My closing opinion, I don’t know…well, yeah, government, I guess, it’s necessary and in the end it’s beneficial for society to have so yeah, as long as do the right job, do the job right and um, yeah, that’s kind of it. (AM)
-I think the government, they can’t do anything but surface values. (AM)

-It’s a pretty good government, all in all, I think. Even if you’re choosing between groups like Liberal/Labor, their views are different but basic principles seem pretty similar and yeah, if you look at other places, we’re pretty well off. (AM)

Values related to individual freedom

- I’d say that’s my choice and you can’t change my mind about it. I think that’s such a big thing in your life that someone else can’t tell you what to do with it. It’s a very personal thing I think. (AF)

-More about personal freedom I think…[as agreed with an opinion that one child policy would not work in Australia as much as in China] (AM)

- I think we’re more about us, again, it goes back to everyone being so concerned about themselves rather than what’s happening around them it’s more about “when am I going to be at work”, “what am I going to get out of this”, not so much “how can I help the community” or “what is best for the community” it’s more like me, me, me. (AM)

- …and like Centrelink doing the same thing. ‘Oh, she carried her shopping bags in and didn’t have a problem. She must not have that disability that you say she has.’ It’s like…err, getting a bit scary so… (AF)

- It’s almost like freedom of speech but it’s more like

- My high school teacher used to say that to obtain freedom, we need some orders. I understand now that individual freedom could be attained in a place and some extent of social order. (JF)

- It may not be a problem if only one person lives in this world, but we have to coexist with others. So if everyone insists on individual freedom, what will happen…? (JF)

- I think our fundamental concepts of individual freedom are different from Australian’s. We refer to living spontaneously as freedom. (JF)

- I wonder if following rules are like a compromise in order to gain one’s freedom. (JF)
freedom of movement rather than... as in they [the Government] can tell you and guide you as to what’s the good choice to make, but ultimately the decision is still yours. Putting in the restrictions, putting in the punishments and stuff is still letting you make the decision, but if you make the decision you get punished. Whereas if they’re starting to say, ‘if you don’t do this’ you know, and it’s just an out of control sort of punishment, is a different thing. (AM)

-I can see it’s their choice to do it [whether smoke or not] and I can see why people would be upset if people were smoking around them if they were non-smokers. But it’s still their decision, it’s their right. Like there’s nothing saying that it’s the right or the wrong thing to do. It’s something that they have made the decision to do, and it’s their decision. It’s like drinking, oh, this person feels like going out and having a drink after work, you know, it’s more socially acceptable but it still can lead to addiction. (AF)

-You don’t want to have to justify yourself to anyone. No one likes having to justify themselves about anything to anyone else. (AF)

-No-one likes being told what they can and can’t do – you know, in such a dramatic way. “Don’t smoke it.” (AF)

-But if the government said, “you have to have three children” or something, then we’d be upset. But if it was open-ended in saying, “we should have more kids” it’s like, well, it’s my choice still. Where the one child...
policy is I’m being told that’s what it is and I don’t like that so… (AF)

-That is one thing that Australians pride themselves on is having the right to say yes or no. They have the choice and it’s a very Australian thing to do, ‘oh, I don’t want to so I’m not going to.’ And I think if the government tried to take that away, it would be like taking away Australia’s spirit really and I don’t… (AF)

-It [having kids] should be the individual’s choice. Not ‘you should have three babies’. (AF)

-That [Australian respects individual freedom] is why I live in Australia basically. I don’t think I’d be able to survive anywhere else that didn’t give me the freedom that I kind of like – I can go to a job that’s like specified for males, kind of, if I want to and I am allowed to show my face and everything like that and I like that sort of freedom, I like the fact that I can be seen as an equal and that the person that is next to me, it’s pretty good. (AF)

-Yeah, you need a balance. Like you can’t have a place where it’s only about individual rights or only about the society, like there has to be an even balance and I think that the environment, like they interlock, you can’t really have one without the other and have a good country or a good sort of atmosphere in the place. It really does have to be on equal or almost equal levels. (AF)

-We have the choice to do what we want and are sort of bound by loose rules. We don’t have to follow
everything, we're not told where we have to be or what we have to do, who we have to be. Yeah, it's good to have like choice of how to live your life. (AM)

-...if you give a country too much freedom, or people too much freedom, more things can go wrong – like with their [American] gun laws and things like that. They have more controls that cause damage to other people, harm to other people. But with Australia we're all sort of brought into line a little bit more and a bit more restricted in those sorts of things that can harm others. (AM)

-It’s [anti-smoke education by the government] what they've been doing for a long time but people still smoke, people still choose to smoke, it’s their choice, it’s their responsibility. (AM)

-...I think it’s important to have individual freedom, I think everyone needs to have individual freedom. Having said that if the community, if the entire community or the entire society is happy and why not then individual freedom is obviously a part of that. (AM)

-I think individual freedom is more important [than social harmony] and again because we've been raised with freedom and so much of it, it’s something that we’re accustomed to, so you take that away from Australians and shit hits the fan, so to speak, yeah. (AM)

-Yes, I think it is. You need to be able to express yourself and you have to be able to do what you want but again,
the law will always prevail, so you can only go as far as the law unless you want to end up in jail. (AM)

-Um…so you’re saying has anyone ever infringed on our freedom, on our personal freedom? Well, I know when you’re a child you don’t want to be at school but the teachers…I mean, that’s a basic example but it’s the truth. They infringe on your freedom. (AM)

-Well you’ve got the Christian Democratic Party when they were handing out their leaflets for the election, they were against gay marriages and gay families, so that is kind of infringing on freedoms. (AM)

-I think it’s a bit of a difference between cultures so…Australians love their individuality and almost rebel but Japan’s a bit more, what’s the word…conservative, yeah. (AM)

-…I think in Australia it’s more really with stuff like that, we know that it’s [recycling] for the good of the whole community and it’s not really putting us out in any way, it’s not like we have to make an ethical decision to throw our stuff anywhere in the red bin or the blue bin, what does it matter really, we’ll just put it in the recycling bin if we can. Yeah, we’re not going to rebel for the sake of rebelling for something like that. If it was like our rights had been deliberately crushed and we can see in the future that it would keep on going further – like with smoking in pubs, I was glad for that rule because I like drinking but I don’t want to consume other people’s smoke all the time. So I like that rule. I don’t think it’s encroaching too much on other people’s beliefs or
freedom because they can just go outside and smoke. Well, freedom, maybe. But it is for the benefit of other people who don’t have a choice in the matter so by smoking in the pub, there is no way out for it but if they just go outside then we have like an even playing field sort of thing. (AM)

-But do you see people as, like people that are…share a very small minority that might get up the skin of a lot of people, would you see that as impeaching on our freedom to walk into a shopping centre and not have to look at the contempt of society for people that just make you feel bad. They’re just angry with everything – is that impeaching on what we want to do? (AM)

-I think as long as you don’t infringe upon what people have the right to do, like, destroy who they are, then it’s ok to try and change it. But if you’re one person trying to say that people should act this way because you believe so, and like you haven’t got any founding or any merit, then you should just piss off. (AM)
Appendix 5A Survey Questionnaire (English Version)
for Pilot Study
Thank you very much for participating in this survey, which is being conducted as part of the requirement of a PhD at Edith Cowan University.

In this survey, we are exploring how university students aged between 18-23 years feel about the government sponsoring social campaigns such as 'Reuse, reduce, recycle waste', 'Don’t drink and drive', and 'Go for 2 fruits & 5 veggies'. The results will provide valuable information about whether your age group thinks government should or should not be involved in social campaigns. The answers are absolutely confidential. Information identifying you will not be disclosed under any circumstances. So please tell us your frank opinions. Once again, we appreciate your time and thank you.

If you have any concerns about this survey, please contact:

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Faculty of Business & Law  
Edith Cowan University  
270 Joondalup Drive, Joondalup,  
WA 6027 Australia

1. Are you 18-23 years old?  
   ○ Yes  
   ○ No --- Thank you but we are looking for 18-23 year olds

2. Are you female or male?  
   ○ Female  
   ○ Male

3. Are you university student?  
   ○ Yes  
   ○ No --- Thank you but this research design is intended for university students

4. Were you born in Australia?  
   ○ Yes  
   ○ No

5. Were you mainly raised in Australia?  
   ○ Yes  
   ○ No --- Thank you but this research design is intended for those who were mainly raised in Australia

6. Do you use English at home with your parent(s)?  
   ○ Yes  
   ○ No --- Thank you but this research design is intended for those who use English at home with their parent(s)

If you have any concerns about this survey and wish to talk to an independent person, you may contact:  
Research Ethics Officer, Ph (08) 6304 2170, Email: research.ethics@ecu.edu.au
7. Were your parent(s) born in Australia?
   ○ Both of my parents were born in Australia
   ○ One of my parents was born in Australia
   ○ Neither of my parents was born in Australia

8. When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express a SIMILAR concept?

1. 

2. 

3. 

9. When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express an OPPOSITE concept?

1. 

2. 

3. 

10. The term ‘social issues’ in the next section refers to various health, safety, and environment issues. Please read the following statements and indicate YOUR degree of agreement or disagreement with each statement.

   Disagree 1 2 3 4 5 Agree

1. I can do the right thing, so other people must be able to do the right thing, too. 1 2 3 4 5

2. The Government should spend taxpayers’ money to solve social issues. 1 2 3 4 5

3. When I need information about a social issue, I would find out what the Government says about it first. 1 2 3 4 5

4. Individual freedom can be achieved but not at the expense of social harmony. 1 2 3 4 5

5. The Government needs to provide us with practical information about how to adopt socially desirable behaviours. 1 2 3 4 5

6. The Government can effectively encourage us to achieve socially desirable behaviours. 1 2 3 4 5

7. If I don’t want to do something, I shouldn’t have to do it. 1 2 3 4 5

8. Information provided by the Government increases our awareness of social issues. 1 2 3 4 5

9. It’s OK for the Government to restrict individual choices in order to solve social issues. 1 2 3 4 5

10. The Government sponsors social campaigns for the public good. 1 2 3 4 5

11. No one can tell me what to do or what not to do. 1 2 3 4 5

12. Government-sponsored social campaigns have had some influence on my behaviours. 1 2 3 4 5

13. I care about social issues even if they are not related to me directly. 1 2 3 4 5
14. If the Government wants us to adopt socially desirable behaviours, it should provide us with some incentives.  

15. If I want to do something, I should be able to do it.  

16. To keep social order, the Government has to control people to some extent.  

17. The Government has responsibility to educate us on socially desirable behaviours.  

18. If the Government wants us to adopt socially desirable behaviours, it should provide us with social infrastructure that facilitates those behaviours.  

19. I should be able to do something as long as I don’t cause anyone else any harm.  

20. Government regulations are an effective way to achieve social order.  

21. Information coming from a government department is likely to be true.  

22. For the good of our communities, sometimes it is necessary to restrain an individual’s freedom.  

11. To what extent do you reject or accept the following ideas?  

The Government should provide information about social issues, leaving us to make our own informed choice  

The Government should provide information, products, and services to influence us directly to adopt socially desirable behaviours  

The Government should pass regulations and laws that control our behaviours through punishments like fines and imprisonment  

The Government should get involved in activities such as social campaigns to influence our behaviour  

12. The following statements are about your response to government’s social campaigns. Which statement BEST describes your attitude and behaviour? (Choose ONE only)  

- I have a complete disregard for the Government’s social campaigns.  

- Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours OR influence me to take any action.  

- Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours BUT I generally DO take some actions.  

- Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours BUT I generally DO NOT take any action.  

- Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours, AND I generally DO take some actions when appropriate.
13. Overall, would you describe yourself as a person who conforms to social norms?
   ○ Yes
   ○ No

14. Overall, would you describe yourself as a person who believes social harmony over individual freedom?
   ○ Yes
   ○ No

--- This is the end of the questionnaire. Thank you very much for your cooperation. ---
Appendix 5B Survey Questionnaire (Japanese Version)
for Pilot Study
アンケートにご協力下さり有難うございます。

本アンケートは、西オーストラリア州立イーディス・コーワン大学博士課程研究の一部として実施しており、18歳から23歳の大学生が、例えば‘3 Rs（リデュース、リユース、リサイクル）’‘飲んだら乗るな’‘食育’、などの「行政主導の社会問題に関わる方策」についてどう感じているか調査することを目的としています。頂戴した回答は、大学生が「政府は社会問題解決を目指した方策に関わるべき」と感じているのか、「関わるべきではない」と考えているのかを知るために大変貴重な資料となります。是非、率直なご意見をお聞かせ下さい。

なお、本アンケート実施に際しては個人情報の保護に十分留意しており、回答者個人を特定するような情報はいかなる状況においても公開されることはありません。なお、ご不明な点などありましたら下記までご連絡下さい。

野坂 薫(Kaoru NOSAKA)
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Postgrad Research Lab (2.149)
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WA 6027 Australia
Email: knosaka@student.ecu.edu.au

1. 年齢は18歳から23歳ですか。
   ○  はい
   ○  いいえ

2. 性別はどちらですか。
   ○  女性
   ○  男性

3. 大学生ですか。
   ○  はい
   ○  いいえ

4. 日本で生まれましたか。
   ○  はい
   ○  いいえ

5. 主に日本で育ちましたか。
   ○  はい
   ○  いいえ

6. ご自宅で日本語を話しますか。
   ○  はい
   ○  いいえ

当アンケートに関する第三機関へのお問い合わせは、イーディス・コーワン大学倫理委員会までお願いします。
電話+61 (8) 6304 2170,  Email: research.ethics@ecu.edu.au
7. 親御さんは日本で生まれましたか。
○ 両親とも日本で生まれた。
○ 両親の一人が外国で生まれた。
○ 両親とも外国で生まれた。

8. 「個人の自由」を他の言葉で表すとしたら、どんな言葉が頭に浮かびますか。下の欄にそれらの言葉を3つ書いて下さい。
1. 
2. 
3. 

9. 「個人の自由」という言葉の反対の意味を考えたとき、どんな言葉が頭に浮かびますか。下の欄にそれらの言葉を3つ書いて下さい。
1. 
2. 
3. 

10. 下の記述の中で用いられている「社会問題」という語句は、健康・安全・環境などに関わる様々な問題を指しています。それぞれの記述を読み、あなた自身はどう思うか1から5の最も当てはまる数字に「○印」をつけて下さい。

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<thead>
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<th>記述</th>
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<tbody>
<tr>
<td>1. 自分は正しいことができるのだから他の人もそうできるはずだ。</td>
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<td>2. 政府は税金を社会問題解決のために使うべきだ。</td>
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<td>3. 社会問題に関する情報が必要な場合、まず政府からの情報を調べるだろう。</td>
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<td>4. 個人の自由は社会の和を犠牲にしてまでも成り立つものではない。</td>
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<td>5. 政府は国民が社会的に望まれる行動をとれるよう、実際的な指針を示す必要がある。</td>
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<td>6. 政府は国民が社会的に望まれる行動をとるよう効果的に支援することができる。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. やりたくないことはやる必要はない。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. 政府が発信する社会問題にかかわる情報は、それらの問題に対する国民の意識を高める。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. 社会問題の解決のためなら個人の行動が制限されても仕方がない。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. よりよい社会のために、政府は社会問題に関わるキャンペーンを支援・実施している。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. 他人に「それをしろ」「それをするな」とは言われたくない。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. 行政主導による社会問題解決のための方策は自分の行動に何らかの影響を与えている。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. 自分に直接関係のない社会問題にも関心がある。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
14. 政府が国民に社会的に望まれる行動をとって欲しければ、何かで動機づけるべきだ。 1 2 3 4 5

15. やりたいことはやってもいい。 1 2 3 4 5

16. 社会秩序を守るためには、政府が国民を統制することもある程度必要だ。 1 2 3 4 5

17. 政府は社会的に望まれる行動を国民に啓発する必要がある。 1 2 3 4 5

18. 政府が国民に社会的に望まれる行動をとって欲しければ、その行動を取りやすくする社会基盤を整えるべきだ。 1 2 3 4 5

19. 他人に迷惑をかけない限りやりたいことはやっている。 1 2 3 4 5

20. 法規は社会秩序を守るために効果がある。 1 2 3 4 5

21. 省庁から発信される情報を間違いない少ない。 1 2 3 4 5

22. 社会のために個人の自由が制限されることがあっても仕方がない。 1 2 3 4 5

11. 次のそれぞれの記述についてあなた自身はどう思うか（認められないー認められる）1から5の最も当てはまる数字に「○印」をつけて下さい。

政府は国民に社会問題に関する情報を提供するが、その後の行動については個人の判断に委ねる。

政府は国民に社会問題に関する情報を提供するたけではなく、行動をとりやすくするサービスや道具なども提供し、社会的に望まれる行動を促す。

国民の行動を統制するために罰金や刑罰などの規則や法律を作る。

国民の行動に影響を与えるために政府が社会問題キャンペーンなどに関わる。

12. 下の記述は政府による社会キャンペーンに対する国民の反応です。あなた自身の態度や行動に最も近いものを一つ選んで下さい。

○ 政府の社会問題キャンペーンにはまったく関心がない。

○ 政府の社会問題キャンペーンによって、その行動への意識が高められることはほとんどないし、自分の行動に何の影響も受けない。

○ 政府の社会問題キャンペーンによって、その行動への意識が高められることはほとんどないが、何らかの行動にはうつす。

○ 政府の社会問題キャンペーンによって、その行動への意識は高められるが、それによって行動は起こさない。

○ 政府の社会問題キャンペーンによって、その行動への意識が高められ、それによって行動も起こす。
13. どちらかと言うと、あなたは一般的な考え方や決まりに従うタイプですか。
○ はい
○ いいえ
14. どちらかと言うと、あなたは個人の自由より社会の和を重んじるタイプですか。
○ はい
○ いいえ

--- これでアンケートは終わりです。ご協力ありがとうございました。 ---
Appendix 5C Demographic characteristics of respondents (Pilot Study)

Table 6C.1 shows demographic characteristics of the 86 respondents, based on ethnicity, gender, birthplace, and parents’ birthplace. 100% of respondents from Japan were born in Japan with parents who were also born in Japan, on the contrary, almost 15% of the Australian respondents were born in overseas, and more than 42% of them had parents who were born in overseas.

Table 5C.1

Demographic Characteristic of Respondents (Pilot Study)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Ethnicity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australian No. (%)</td>
<td>Japanese No. (%)</td>
<td>Total No. (%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>47 (54.0)</td>
<td>39 (46.0)</td>
<td>86 (100)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>24 (51.1)</td>
<td>20 (51.3)</td>
<td>44 (51.2)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23 (48.9)</td>
<td>19 (48.7)</td>
<td>42 (48.8)</td>
<td></td>
</tr>
<tr>
<td>Birthplace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia/ Japan</td>
<td>40 (85.1)</td>
<td>39 (100)</td>
<td>79 (91.9)</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>7 (14.9)</td>
<td>0</td>
<td>7 (8.1)</td>
<td></td>
</tr>
<tr>
<td>Parents’ birthplace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both Australia/Japan</td>
<td>18 (38.3)</td>
<td>39 (100)</td>
<td>57 (66.3)</td>
<td></td>
</tr>
<tr>
<td>One Australia/Japan</td>
<td>9 (19.1)</td>
<td>0</td>
<td>9 (10.5)</td>
<td></td>
</tr>
<tr>
<td>Neither Australia/Japan</td>
<td>20 (42.6)</td>
<td>0</td>
<td>20 (23.2)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5D Results of Observations and Feedback from Respondents (Pilot Study)

Observations and time recording found that:

- Respondents showed their interests in the topic of the survey at the both universities;
- At the both universities, respondents appeared to struggle with descriptive questions about similar and opposite concepts of individual freedom slightly; and
- At the both universities, the average time to complete the questionnaire was between 10 and 15 minutes.

Examination of respondents’ feedback found that:

- At the both universities, respondents expressed difficulties in choosing answers to multiple-items related to the readiness and the values because the contexts of the items were too abstract for them;
- Japanese respondents were not familiar with a translated word of ‘social campaigns’ even though the translation kept the meaning as they were in English; and
- Japanese respondents preferred wordings that are more casual.

Examination of questionnaires completed by respondents found that:

- All the questions were answered by respondents as instructed in the questionnaire; and
- Eight respondents did not answer one question each. The missing values for a variable were mainly found in 22 statements of Q.10; however, there was no tendency which statement was not answered.
Appendix 5E Concepts of Individual Freedom (Pilot Study)

133 words and sentences in English from Australian and 106 in Japanese from Japanese respondents, 239 in total, were collected as similar concepts to a word ‘individual freedom’. 124 words and sentences in English from Australian and 106 in Japanese from Japanese respondents, 230 in total, were provided as opposite concepts. The words and sentences were categorised based on similarities in meanings by the researcher and a bilingual (English and Japanese) Professor, using NVivo8, software of qualitative data analysis, and this processes were repeated until the two analysts reached agreements in the categorisation. Table 5E.1 summarises the final categories and their representative words.

After the categorisation, some of those categories were further grouped into upper-level categories, shown in tables 5E.2 and 5E.3. In each table, the far left column presents names of categories with total percentage against the total categorised word numbers (in parentheses), and the right-hand two columns show the percentage against the total categorised word numbers (in parentheses) by ethnicity. Under the each upper-level category are lower categories and they are shown with the percentage against the total categorised word numbers (in parentheses) by ethnicity. Blank columns show no applicable words. Categories that have only one word in total were excluded from analysis.

Based on those analyses, in the similar concepts, the researcher found that:

- ‘Individual freedom’ was paraphrased into ‘Free expression’ and ‘Happiness’ only by the Australian respondents;
- ‘Individual freedom’ was paraphrased into ‘Free religion’, ‘Responsibility’, ‘Excuse’, and ‘Selfishness’ only by the Japanese respondents;
- As suggested by early authors (e.g. Doi, 1981; Nakane, 1973), unlike the Australian respondents, the Japanese respondents perceived meanings of a word ‘individual freedom’ not only positively, but also negatively;
Concerning lower categories, the words related to ‘individuality’ were described by the Australian respondents most (17%) and the words related to ‘carefree’ by the Japanese respondents (13%);

Concerning upper categories, the words grouped into ‘no control by others’ occupied the most, 51% of the Australian response; however, 25% of the Japanese respondents. The words grouped into ‘individualism’ were mentioned by the Japanese respondents most, 30%; and

The findings informed that Australian and Japanese university students had different concepts of a word ‘individual freedom’, which agreed with the focus groups.

However, regarding the opposite words to ‘individual freedom’, the Australian and Japanese respondents showed several similarities, including:

Although the similar words had six upper categories, the opposite words were grouped into four, which meant a smaller dispersion of the concepts between the Australian and Japanese respondents;

Although there were some lower categories that were mentioned only the Australian or Japanese respondents, the respondents showed similar percentages of the four upper categories;

In both the Australian and Japanese respondents, more than 65% of the respondents have ‘control’ as an opposite concept of a word ‘individual freedom’ and

The findings suggested that Australian and Japanese university students were likely to have similar concepts towards an opposite word of ‘individual freedom’.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>being free from</td>
<td>Independence, No rules, Free will, Privacy</td>
</tr>
<tr>
<td>free speech</td>
<td>Free speech, Being able to say what I want, Expression through speech</td>
</tr>
<tr>
<td>free expression</td>
<td>Free expression, A chance to express your views, Voice your own opinion</td>
</tr>
<tr>
<td>free thoughts</td>
<td>Free thought, Unforced beliefs, Think how you want, Freedom of ideas</td>
</tr>
<tr>
<td>free rein</td>
<td>Do what you want, Movement freedom, Act independently</td>
</tr>
<tr>
<td>free decision</td>
<td>Ability to make our choices, Own decisions, Choice</td>
</tr>
<tr>
<td>free religion</td>
<td>Religions, Free religion</td>
</tr>
<tr>
<td>boundless</td>
<td>Unbounded, More choices</td>
</tr>
<tr>
<td>diversity</td>
<td>Different, Diversity, Variety, Languages, Dialects</td>
</tr>
<tr>
<td>individuality</td>
<td>Self-image, Individuality, Personal, Unique, The I</td>
</tr>
<tr>
<td>responsibility</td>
<td>Own responsibility, Responsibility</td>
</tr>
<tr>
<td>rights</td>
<td>Rights, Human rights</td>
</tr>
<tr>
<td>excuse</td>
<td>Excuse</td>
</tr>
<tr>
<td>selfishness</td>
<td>Selfishness, Monopoly, Egotistic, Self-complacency</td>
</tr>
<tr>
<td>priority</td>
<td>Priorities, Necessary thing</td>
</tr>
<tr>
<td>peace</td>
<td>Love &amp; peace, Safety, Peace</td>
</tr>
<tr>
<td>happiness</td>
<td>Happy, Pursuit of happiness, Happiness</td>
</tr>
<tr>
<td>carefree</td>
<td>Carefree, Leisure time, Easy</td>
</tr>
<tr>
<td>democracy</td>
<td>Democracy</td>
</tr>
<tr>
<td>metaphor</td>
<td>Obama, Furniture, Australia,</td>
</tr>
<tr>
<td>authority</td>
<td>Authority, Government, Dictatorship, Police actions, Power, Imperialism</td>
</tr>
<tr>
<td>communist</td>
<td>Communist</td>
</tr>
<tr>
<td>confine</td>
<td>Confined, Trapped, Jail, Prison, Gaol</td>
</tr>
<tr>
<td>intervention</td>
<td>Intervened by others, No privacy, Intervention</td>
</tr>
<tr>
<td>oppression</td>
<td>Oppression, Suppress, Enforcement, Torture</td>
</tr>
<tr>
<td>regulations</td>
<td>Rules, Laws, Regulations, Public rules</td>
</tr>
<tr>
<td>restriction</td>
<td>Restriction, Not being able to do what I want to do, No personal rights</td>
</tr>
<tr>
<td>grouping</td>
<td>Sameness, Totalitarianism, Unification, Customs, Majority decision</td>
</tr>
<tr>
<td>obedience</td>
<td>Obey parents, Following, Conformity, Sheep mentality</td>
</tr>
<tr>
<td>obligation</td>
<td>Obligation</td>
</tr>
<tr>
<td>patience</td>
<td>Patience, Need to be patient</td>
</tr>
<tr>
<td>metaphor</td>
<td>Robots, Nazi, North Korea, Hitler, School</td>
</tr>
<tr>
<td>negative feeling</td>
<td>Unhappy, Sadness, Anxiety,</td>
</tr>
</tbody>
</table>
Table 5E.2
Categories and Frequency: Similar Concepts to Individual Freedom

<table>
<thead>
<tr>
<th>Categories (sub-categories)</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australians (133 words)</td>
</tr>
<tr>
<td>No control by others 40% (95 words)</td>
<td>51% (68 words)</td>
</tr>
<tr>
<td>being free from control 11% (15 words)</td>
<td>8% (9 words)</td>
</tr>
<tr>
<td>free speech 13% (17 words)</td>
<td>1% (1 word)</td>
</tr>
<tr>
<td>free expression</td>
<td>6% (8 words)</td>
</tr>
<tr>
<td>free thoughts</td>
<td>6% (8 words)</td>
</tr>
<tr>
<td>free rein</td>
<td>4% (5 words)</td>
</tr>
<tr>
<td>free decision 10% (13 words)</td>
<td>4% (4 words)</td>
</tr>
<tr>
<td>free religion</td>
<td></td>
</tr>
<tr>
<td>boundless</td>
<td>2% (2 words)</td>
</tr>
<tr>
<td>Individualism 28% (67 words)</td>
<td>26% (35 words)</td>
</tr>
<tr>
<td>diversity</td>
<td>5% (6 words)</td>
</tr>
<tr>
<td>individuality 17% (22 words)</td>
<td>8% (8 words)</td>
</tr>
<tr>
<td>responsibility</td>
<td></td>
</tr>
<tr>
<td>rights</td>
<td>5% (7 words)</td>
</tr>
<tr>
<td>Negative perceptions 5% (12 words)</td>
<td></td>
</tr>
<tr>
<td>excuse</td>
<td>1% (1 word)</td>
</tr>
<tr>
<td>selfishness</td>
<td>10% (11 words)</td>
</tr>
<tr>
<td>Positive perceptions 13% (31 words)</td>
<td>7% (9 words)</td>
</tr>
<tr>
<td>priority</td>
<td>1% (1 word)</td>
</tr>
<tr>
<td>peace</td>
<td>3% (4 words)</td>
</tr>
<tr>
<td>happiness</td>
<td>2% (3 words)</td>
</tr>
<tr>
<td>carefree</td>
<td>1% (1 word)</td>
</tr>
<tr>
<td>Democracy</td>
<td>3% (7 words)</td>
</tr>
<tr>
<td>Metaphor</td>
<td>4% (10 words)</td>
</tr>
</tbody>
</table>

Note. Lower categories with over 10% are highlighted in bold
### Table 5E.3

**Categories and Frequency: Opposite Concepts to Individual Freedom**

<table>
<thead>
<tr>
<th>Categories (sub-categories)</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australians (124 words)</td>
</tr>
<tr>
<td>Control</td>
<td>68% (156 words)</td>
</tr>
<tr>
<td>authority</td>
<td>16% (20 words)</td>
</tr>
<tr>
<td>communist</td>
<td>4% (5 words)</td>
</tr>
<tr>
<td>confine</td>
<td>21% (26 words)</td>
</tr>
<tr>
<td>intervention</td>
<td></td>
</tr>
<tr>
<td>oppression</td>
<td>6% (7 words)</td>
</tr>
<tr>
<td>regulations</td>
<td>7% (9 words)</td>
</tr>
<tr>
<td>restriction</td>
<td>16% (20 words)</td>
</tr>
<tr>
<td>Conformity</td>
<td>17% (38 words)</td>
</tr>
<tr>
<td>grouping</td>
<td>3% (4 words)</td>
</tr>
<tr>
<td>obedience</td>
<td>10% (13 words)</td>
</tr>
<tr>
<td>obligation</td>
<td></td>
</tr>
<tr>
<td>patience</td>
<td></td>
</tr>
<tr>
<td>Metaphor</td>
<td>5% (11 words)</td>
</tr>
<tr>
<td>Negative feeling</td>
<td>3% (8 words)</td>
</tr>
</tbody>
</table>

*Note.* Lower categories with over 10% are highlighted in bold.
Appendix 5F Quantitative Results: 22 items of Q.10
(Pilot Study)

Table 5F presents scores of means (M) and standard deviations (SD) from 22 items of Q.10 by ethnicity. The respondents were given 5-point Likert scales, where 1 = Disagree and 5 = Agree and asked to circle the number that reflected their degree of disagreement or agreement. Minimum value was 1 and maximum value was 5 for all of the 22 items through all the groups. VA2, VA3, VA4, and VA5 are reversed items so that their original scores were transformed as 1 to 5, 2 to 4, 3 to 3, 4 to 2, and 5 to 1, using a transform function of SPSS Statistics 17.0.

To test the scores from 22 of Q10 (GV1, GV2, GV3, GV4, ED1, ED2, ED3, ED4, PR1, PR2, PR3, PR4, PT1, PT2, PT3, PT4, VA1, VA2, VA3, VA4, VA5, and VA6) were normally distributed; the Kolmogorov-Smirnov (K-S) test was used. The results of the test showed that the 16 items of the readiness were non-normally distributed (p-values: 0.007, 0.000, 0.009, 0.000, 0.000, 0.004, 0.006, 0.008, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.004, 0.001, 0.003, 0.006, 0.000, 0.001, and 0.010 respectively).

Based on the non-normality, the non-parametric Mann-Whitney test was chosen to determine whether the scores of the 22 items were different between Australian and Japanese scores. The non-parametric Mann-Whitney test revealed:

- Australian scores did not seem to differ in acceptance levels of GV3 \( (U = 605.00, p = 0.115) \), GV4 \( (U = 638.50, p = 0.221) \), ED2 \( (U = 5670.50, p = 0.362) \), ED3 \( (U = 706.50, p = 0.600) \), ED4 \( (U = 630.50, p = 0.187) \), PR2 \( (U = 692.00, p = 0.497) \), PR3 \( (U = 665.00, p = 0.335) \), PT3 \( (U = 644.00, p = 0.225) \), VA1 \( (U = 574.50, p = 0.055) \), VA5 \( (U = 746.50, p = 0.921) \), and VA6 \( (U = 751.50, p = 0.963) \) from Japanese (see details in Table 5F.1);
- Australians were significantly higher in acceptance levels of GV2 \( (U = 547.50, p = 0.029) \) and PT1 \( (U = 476.00, p = 0.004) \) than Japanese (see details in 5F.1); and
- Australians were significantly lower in readiness levels of GV1 \( (U = 261.00, p = 0.000) \), ED1 \( (U = 315.50, p = 0.000) \), PR1 \( (U = 478.00, p = 0.003) \), PR4 \( (U = 479.00, p = 0.003) \), PT2 \( (U = 427.50, p = 0.001) \), PT4 \( (U = 276.00, p = 0.000) \),
VA2 ($U = 228.00, p = 0.000$), VA3 ($U = 533.00, p = 0.021$), and VA4 ($U = 512.00, p = 0.010$) than Japanese (see details in Table 5F.1).

Table 5F.1

Means (M) and Standard Deviations (SD) of Scores of 22 items

<table>
<thead>
<tr>
<th>Items</th>
<th>Australians</th>
<th></th>
<th></th>
<th></th>
<th>Japanese</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 42</td>
<td></td>
<td></td>
<td></td>
<td>n = 36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GV1</td>
<td>3.36</td>
<td>0.82</td>
<td></td>
<td></td>
<td>4.39</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GV2</td>
<td>3.43</td>
<td>0.91</td>
<td></td>
<td></td>
<td>2.86</td>
<td>1.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GV3</td>
<td>3.10</td>
<td>1.01</td>
<td></td>
<td></td>
<td>2.72</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GV4</td>
<td>3.57</td>
<td>1.02</td>
<td></td>
<td></td>
<td>3.22</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED1</td>
<td>2.26</td>
<td>0.86</td>
<td></td>
<td></td>
<td>3.47</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED2</td>
<td>3.57</td>
<td>0.77</td>
<td></td>
<td></td>
<td>3.36</td>
<td>1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED3</td>
<td>3.67</td>
<td>0.95</td>
<td></td>
<td></td>
<td>3.56</td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED4</td>
<td>2.60</td>
<td>0.91</td>
<td></td>
<td></td>
<td>2.33</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR1</td>
<td>3.50</td>
<td>0.77</td>
<td></td>
<td></td>
<td>4.03</td>
<td>1.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR2</td>
<td>3.36</td>
<td>0.79</td>
<td></td>
<td></td>
<td>3.42</td>
<td>1.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR3</td>
<td>3.74</td>
<td>1.06</td>
<td></td>
<td></td>
<td>4.00</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR4</td>
<td>3.71</td>
<td>0.94</td>
<td></td>
<td></td>
<td>4.33</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT1</td>
<td>3.88</td>
<td>1.17</td>
<td></td>
<td></td>
<td>3.06</td>
<td>1.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT2</td>
<td>2.21</td>
<td>0.95</td>
<td></td>
<td></td>
<td>3.06</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT3</td>
<td>3.43</td>
<td>1.02</td>
<td></td>
<td></td>
<td>3.72</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT4</td>
<td>3.19</td>
<td>0.77</td>
<td></td>
<td></td>
<td>4.22</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA1</td>
<td>3.31</td>
<td>0.84</td>
<td></td>
<td></td>
<td>3.67</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA2*</td>
<td>2.29</td>
<td>1.23</td>
<td></td>
<td></td>
<td>4.03</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA3*</td>
<td>2.57</td>
<td>0.91</td>
<td></td>
<td></td>
<td>3.14</td>
<td>1.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA4*</td>
<td>2.07</td>
<td>0.81</td>
<td></td>
<td></td>
<td>2.64</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA5*</td>
<td>2.10</td>
<td>0.98</td>
<td></td>
<td></td>
<td>2.17</td>
<td>1.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA6</td>
<td>3.19</td>
<td>1.17</td>
<td></td>
<td></td>
<td>3.17</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE.** Each item is represented by two alphabetical letters and a number, based on their predicted latent factors. GV represents readiness to accept government being involved in social marketing activities; ED is readiness to accept government’s education social marketing approach; PR is readiness to accept government’s promotional social marketing approach; PT is readiness to accept government’s paternalistic social marketing approach; and VA is values related to the freedom of the individual. GV has eight items, ED, PR, and PT have four items, and VA has six items each.

* = reversed items
Appendix 5G Quantitative Results: Q11, Q12, Q13, & Q14 (Pilot Study)

5G.1 Q11: Single-item scale

Four questions of Q11 (see table 5G.1 for descriptions of Q11-1, Q11-2, Q11-3, and Q11-4) were designed to measure respondents’ readiness levels to accept government’s involvement in social marketing activities, government’s educational, promotional, and paternalistic social marketing approaches by a single variable each. The respondents were given 5-point Likert scales, where 1 = Reject and 5 = Accept, and asked to circle the number that reflected their degree of acceptance or rejection.

Table 5G.1
4 Observed Items for Q11 (Pilot Study)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11-1</td>
<td>The Government should provide information about social issues, leaving us to make our own informed choice.</td>
</tr>
<tr>
<td>Q11-2</td>
<td>The Government should provide information, products, and services to influence us directly to adopt socially desirable behaviours.</td>
</tr>
<tr>
<td>Q11-3</td>
<td>The Government should pass regulations and laws that control our behaviours through punishments like fines and imprisonment.</td>
</tr>
<tr>
<td>Q11-4</td>
<td>The Government should get involved in activities such as social campaigns to influence our behaviour.</td>
</tr>
</tbody>
</table>

Scores of means (M) and standards (SD) from the four items are reported in table 5G.2 by ethnicities.

Table 5G.2
Means (M) and Standard Deviations (SD) of Scores of Q11 (Pilot Study)

| Ethnicities | Australians  
|-------------|--------------|
|             | $n = 47$     | Japanese    
|             | $n = 36$     |              |
| Items | M | SD | M | SD |
| Q11-1 | 4.05 | 0.99 | 3.47 | 1.03 |
| Q11-2 | 3.38 | 0.96 | 3.83 | 0.88 |
| Q11-3 | 3.10 | 1.05 | 3.64 | 0.90 |
| Q11-4 | 3.17 | 1.06 | 3.86 | 0.99 |
To test if the four single-item variables related to the readiness (Q11-1, Q11-2, Q11-3, and Q11-4) were normally distributed; the Kolmogorov-Smirnov (K-S) test was used. The results of the test showed that the variables were non-normally distributed (p-values: 0.000, 0.000, 0.000, and 0.000, respectively).

Based on the non-normality, the non-parametric Mann-Whitney test was chosen to determine whether the scores of four items were different. The non-parametric Mann-Whitney test revealed:

- Australians were significantly higher in acceptance levels of Q11-1 \((U = 502.00, p = 0.008)\) than Japanese (see details in table 5G.2); and
- Australians were significantly lower in acceptance levels of Q11-2 \((U = 561.00, p = 0.039)\), Q11-3 \((U = 512.00, p = 0.009)\), and Q11-4 \((U = 477.50, p = 0.004)\) than Japanese (see details in table 5G.2).

5G.2 Q12: Actual response

In Q12 of the questionnaire for pilot study, respondents were given five statements about general attitudes and behaviours towards government’s social campaigns, and from which, they were asked to choose one that described their attitude and behaviours best (see table 5G.3 shows descriptions of each statement).

Table 5G.3
5 Observed Items for Q12 (Pilot Study)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12-1</td>
<td>I have a complete disregard for the Government’s social campaigns.</td>
</tr>
<tr>
<td>Q12-2</td>
<td>Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours OR influence me to take any action.</td>
</tr>
<tr>
<td>Q12-3</td>
<td>Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours BUT I generally DO take some actions.</td>
</tr>
<tr>
<td>Q12-4</td>
<td>Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours BUT I generally DO NOT take any action.</td>
</tr>
<tr>
<td>Q12-5</td>
<td>Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours, AND I generally DO take some actions when appropriate.</td>
</tr>
</tbody>
</table>
Table 5G.4 reports the frequency distribution of respondents across the categories by ethnicity. For intelligibility, the question numbers of the four items were replaced by an abbreviation of attitudes and actions. Hence, Q12-1 is described as ‘Disregard’, Q12-2 ‘No & No’, Q12-3 ‘No & Do’, Q12-4 ‘Do & No’, and Q12-5 ‘Do & Do’ in the table.

Table 5G.4
Response towards Government’s Social Campaigns by Ethnicity (Pilot Study)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Disregard</th>
<th>No &amp; No</th>
<th>No &amp; Do</th>
<th>Do &amp; No</th>
<th>Do &amp; Do</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australians</td>
<td>4</td>
<td>7</td>
<td>9</td>
<td>15</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>Japanese</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>19</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>11</td>
<td>15</td>
<td>34</td>
<td>13</td>
<td>78</td>
</tr>
</tbody>
</table>

The result was:

- In both Australians and Japanese distributions, the mode was ‘Do & No’.

However, because of occurrence of the less than five frequencies, no statistical analysis was conducted to examine relationships between ethnicity and behaviours.

5G.3 Q13 and Q14: Conformity and social harmony

Respondents were also asked to answer whether they described themselves as a person who conforms to social norms (Q13 in a questionnaire for pilot study), and whether they described themselves as a person who believes social harmony over individual freedom (Q14 in a questionnaire for pilot study) (see table 5G.5 for each description).

Table 5G.5
2 Observed Items for Q13 and Q14 (Pilot Study)

<table>
<thead>
<tr>
<th>Items</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13</td>
<td>Overall, I describe myself as a person who conforms to social norms.</td>
</tr>
<tr>
<td>Q14</td>
<td>Overall, I describe myself as a person who believes social harmony is more important than individual freedom.</td>
</tr>
</tbody>
</table>
Tables 5G.6 and 5G.7 show frequency distributions of respondents across the two categories about their conformity tendencies and about their beliefs in importance of social harmony respectively.

Table 5G.6  
**Tendency of Conformity by Ethnicity (Pilot Study)**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Conformity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
</tr>
<tr>
<td>Australians</td>
<td>29</td>
<td>13</td>
<td>42</td>
</tr>
<tr>
<td>Japanese</td>
<td>29</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>20</td>
<td>78</td>
</tr>
</tbody>
</table>

Table 5G.7  
**Importance of Social Harmony by Ethnicity (Pilot Study)**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Importance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
</tr>
<tr>
<td>Australians</td>
<td>26</td>
<td>16</td>
<td>42</td>
</tr>
<tr>
<td>Japanese</td>
<td>26</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>26</td>
<td>78</td>
</tr>
</tbody>
</table>

There was no frequency count less than five; therefore, to test relationships between ethnicity and conformity and between ethnicity and social harmony, Pearson’s chi-square test was used. The results were:

- There was no significant association between ethnicity and conformity tendencies; $\chi^2 (1) = 1.346, p = .246$; and
- There was no significant association between ethnicity and beliefs in importance of social harmony; $\chi^2 (1) = 0.939, p = .335$. 
Appendix 5H Survey Questionnaire (English Version)
for Main Study
Thank you very much for participating in this survey, which is being conducted as part of the requirement of a PhD at Edith Cowan University.

We are asking university students how they feel about government-conducted social campaigns such as ‘Reuse, reduce, recycle waste’, ‘Don’t drink and drive’, and ‘Go for 2 fruits & 5 veggies’. Your answers are completely confidential. So please tell us your frank opinions. Once again, we appreciate your time and thank you.

If you have any concerns about this survey, please contact:

Kaoru NOSAKA
PhD candidate
Postgrad Research Lab (2.149)
Edith Cowan University,
270 Joondalup Drive, Joondalup,
WA 6027 Australia
Email: knosaka@student.ecu.edu.au

Professor Nadine HENLEY
Supervisor
School of Marketing, Tourism & Leisure
Faculty of Business & Law
Edith Cowan University
270 Joondalup Drive, Joondalup,
WA 6027 Australia

1. Are you 18-23 years old?
   - Yes
   - No --- Thank you but we are looking for 18-23 year olds

2. Are you university student?
   - Yes
   - No --- Thank you but this research design is intended for university students

3. Were you mainly raised in Australia?
   - Yes
   - No --- Thank you but this research design is intended for those who were mainly raised in Australia

4. Do you use English at home with your parent(s)?
   - Yes
   - No --- Thank you but this research design is intended for those who use English at home with their parent(s)

5. Are you female or male?
   - Female
   - Male

6. Were you born in Australia?
   - Yes
   - No
7. Were your parent(s) born in Australia?
- ○ Both of my parents were born in Australia
- ○ One of my parents was born in Australia
- ○ Neither of my parents was born in Australia

8. When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express a SIMILAR concept?
1. 
2. 
3. 

9. When you think about the words ‘individual freedom’, what 3 other words or phrases come to mind, which express an OPPOSITE concept?
1. 
2. 
3. 

10. The term ‘social issues’ in the next section refers to various health, safety, and environmental issues. To help in these areas, the Government has been involved in various activities, including social advertising and educational campaigns. Please read the following statements and tell us how you feel about the government’s participation with these issues. Circle the number that reflects YOUR degree of agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Government has no right to tell us what to do or not to do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I can do the right thing, so other people must be able to do the right thing, too.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The Government should spend taxpayers’ money to solve social issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. When I need information about a social issue, I would find out what the Government says about it first.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Individual freedom can be achieved but not at the expense of social harmony.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The Government needs to provide us with practical information about how to adopt socially desirable behaviours.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The Government can effectively encourage us to achieve socially desirable behaviours.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. If I don’t want to do something, I shouldn’t have to do it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The role of the Government is to tell us how to lead our lives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The Government has a responsibility to protect and promote the public good.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Information provided by the Government increases our awareness of social issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. It’s OK for the Government to restrict individual choices in order to solve social issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>The Government sponsors social campaigns for the public good.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>No one can tell me what to do or what not to do.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Government-sponsored social campaigns have had some influence on my behaviours.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I care about social issues even if they are not related to me directly.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us with some incentives.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>If I want to do something, I should be able to do it.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>The Government has a responsibility to reduce risks caused by social issues.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>To keep social order, the Government has to control people to some extent.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>The Government has responsibility to educate us on socially desirable behaviours.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>If the Government wants us to adopt socially desirable behaviours, it should provide us with social infrastructure that facilitates those behaviours.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I should be able to do something as long as I don’t cause anyone else any harm.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Government regulations are an effective way to achieve social order.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Information coming from a government department is likely to be true.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>For the good of our communities, sometimes it is necessary to restrain an individual’s freedom.</td>
<td>1 2 3 4 5</td>
<td>Agree</td>
<td>1 2 3 4 5</td>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. To what extent do you reject or accept the following ideas?

| The Government should provide information about social issues, leaving us to make our own informed choice. | 1 2 3 4 5 | Accept | 1 2 3 4 5 | Reject |
| The Government should provide information, products, and services to influence us directly to adopt socially desirable behaviours. | 1 2 3 4 5 | Accept | 1 2 3 4 5 | Reject |
| The Government should pass regulations and laws that control our behaviours through punishments like fines and imprisonment. | 1 2 3 4 5 | Accept | 1 2 3 4 5 | Reject |
| The Government should get involved in activities such as social campaigns to influence our behaviour. | 1 2 3 4 5 | Accept | 1 2 3 4 5 | Reject |

12. The following statements are about your response to government’s social campaigns. Please read them CAREFULLY and circle YOUR degree of agreement or disagreement with each statement.

| I have a complete disregard for the Government’s social campaigns. | 1 2 3 4 5 | Agree | 1 2 3 4 5 | Disagree |
| Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours OR influence me to take any action. | 1 2 3 4 5 | Agree | 1 2 3 4 5 | Disagree |
| Overall, the Government’s social campaigns DO NOT increase my awareness of socially desirable behaviours BUT I generally DO take some actions. | 1 2 3 4 5 | Agree | 1 2 3 4 5 | Disagree |
Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours BUT I generally DO NOT take any action.

Overall, the Government’s social campaigns DO increase my awareness of socially desirable behaviours, AND I generally DO take some actions when appropriate.

13. Please read the following statements and circle the number of YOUR choice.

Disagree 1 2 3 4 5 Agree

Overall, I describe myself as a person who conforms to social norms.

Overall, I describe myself as a person who believes social harmony is more important than individual freedom.

Generally, individual freedom is one of the most important values in our society.

Individual freedom is one of the most important values for me.

This is the end of the questionnaire.

Please make sure that you answered ALL THE QUESTIONS over again.

Thank you very much for your cooperation.
Appendix 5I Survey Questionnaire (Japanese Version)
for Main Study
博士課程研究調査：
行政主導の社会問題に関する方策について

本アンケート調査は、西オーストラリア州立イーディス・コーワン大学博士課程研究の一環として実施しており、日本の大学生が、「3 Rs（リデュース、リユース、リサイクル）’‘飲んだら乗るな’‘食育’などの「行政主導の社会問題に関する方策」についてどう感じているかお聞きするものです。それぞれの質問をよく読み、ご自身について率直にお答え下さい。本調査は完全に匿名で行われ、調査以外の目的でデータを使用されることはありません。ご協力に感謝申し上げます。

本調査について不明な点などありましたら下記までご連絡下さい。

野坂 薫 (Kaoru NOSAKA)
PhD candidate
Postgrad Research Lab (2.149)
Edith Cowan University,
270 Joondalup Drive, Joondalup,
WA 6027 Australia
Email: knosaka@student.ecu.edu.au

1. 年齢は18歳から23歳ですか。
   ○ はい
   ○ いいえ --- 18歳から23歳を対象にした調査です。ご協力ありがとうございました。

2. 大学生ですか。
   ○ はい
   ○ いいえ--- 大学生を対象にした調査です。ご協力ありがとうございました。

3. 主に日本で育ちましたか。
   ○ はい
   ○ いいえ--- 日本で育った方を対象にした調査です。ご協力ありがとうございました。

4. ご自宅で日本語を話しますか。
   ○ はい
   ○ いいえ--- ご自宅で日本語を話す方を対象にした調査です。ご協力ありがとうございました。

5. 性別はどちらですか。
   ○ 女性
   ○ 男性

6. 日本で生まれましたか。
   ○ はい
   ○ いいえ

当アンケートに関する第三機関へのお問い合わせは、イーディス・コーワン大学倫理委員会までお願いします。
電話+61 (8) 6304 2170， Email: research.ethics@ecu.edu.au
7. 親御さんは日本で生まれましたか。
○ 両親とも日本で生まれた。
○ 両親の一人が外国で生まれた。
○ 両親とも外国で生まれた。

8. 「個人の自由」を他の言葉で表すとしたら、どんな言葉が頭に浮かびますか。下の欄にそれらの言葉を3つ書いて下さい。

   1. 
   2. 
   3. 

9. 「個人の自由」という言葉の反対の意味を考えたとき、どんな言葉が頭に浮かびますか。下の欄にそれらの言葉を3つ書いて下さい。

   1. 
   2. 
   3. 

10. 次の記述の中で使われている「社会問題」という言葉は、健康・安全・環境などに関わる様々な社会問題を指しています。政府はこれらの問題を、広報・啓蒙なども含めた種々の活動を通じて解決しようとしています。このような社会問題に対する政府の関わりについてあなたはどう思いますか。それぞれの記述を読み、あなたの考えを最も適切にあらわしている数字を1から5の中から一つ選び「○印」をつけて下さい。

   1. 政府は国民に何をするべきかするべきではないか言う権利はない。 1 2 3 4 5
   2. 人は正しいことをできるのだから他の人もそうできるはずだ。 1 2 3 4 5
   3. 政府は税金を社会問題解決のために使うべきだ。 1 2 3 4 5
   4. 社会問題に関する情報が必要な場合、まず政府からの情報を調べるだろう。1 2 3 4 5
   5. 個人の自由は社会の和を犠牲にしてまでも成り立つものではない。 1 2 3 4 5
   6. 政府は国民が社会的に望まれる行動をとれるよう、実際的な指針を示す必要がある。1 2 3 4 5
   7. 政府は国民が社会的に望まれる行動をとるよう効果的に促すことができると考える。 1 2 3 4 5
   8. やりたくないことはやる必要はない。 1 2 3 4 5
   9. 政府の役割は国民にどのような暮らしを送るべきか示すことだ。 1 2 3 4 5
   10. 政府は公益を守り促進する責任がある。 1 2 3 4 5
   11. 政府が発信する社会問題にかかわる情報は、それらの問題に対する国民の意識を高める。 1 2 3 4 5
   12. 社会問題の解決のためなら個人の選択の自由が制限されても仕方がない。 1 2 3 4 5
### 11. 次のそれぞれの記述についてあなた自身は容認できますか、できませんか。1から5の最も当てはまる数字に「○印」をつけて下さい。

<table>
<thead>
<tr>
<th>記述内容</th>
<th>紹介事項</th>
</tr>
</thead>
<tbody>
<tr>
<td>政府は国民に社会問題に関する情報を提供するが、その後の行動については個人の判断に委ねる。</td>
<td>容認できる</td>
</tr>
<tr>
<td>政府は国民に社会問題に関する情報だけでなくサービスや道具なども提供し、社会的に望まれる行動をとやすくする。</td>
<td>容認できる</td>
</tr>
<tr>
<td>政府が国民の行動を統制するために罰金や刑罰などの規則や法律を作る。</td>
<td>容認できる</td>
</tr>
<tr>
<td>政府が国民の行動に影響を与えるため、社会問題の解決に向けた様々な活動に関わる。</td>
<td>容認できる</td>
</tr>
</tbody>
</table>

### 12. 次の記述は政府による社会問題の解決に向けた活動に対する反応例です。それぞれの記述はあなた自身に当てはまりますか、当てはまりませんか。文章をよく読み、1から5の最も適切な数字に「○印」をつけて下さい。

<table>
<thead>
<tr>
<th>記述内容</th>
<th>紹介事項</th>
</tr>
</thead>
<tbody>
<tr>
<td>政府の社会問題の解決に向けた様々な活動はまったく関心がない。</td>
<td>当てはまらない</td>
</tr>
<tr>
<td>政府の社会問題の解決に向けた様々な活動によって、その行動への意識が高められることはほとんどないし、自分の行動に何の影響も受けない。</td>
<td>当てはまらない</td>
</tr>
<tr>
<td>政府の社会問題の解決に向けた様々な活動によって、その行動への意識が高められることはほとんどないが、何らかの行動にはつсут。</td>
<td>当てはまる</td>
</tr>
</tbody>
</table>

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政府の社会問題の解決に向けた様々な活動によって、その行動への意識は高められるが、それによって行動は起こさない。

政府の社会問題の解決に向けた様々な活動によって、その行動への意識が高められ、それによって行動も起こす。

13. 次の記述を読み、あなた自身、あるいはあなたの考えを最も適切にあらわしている数字を1から5の中から一つ選び「○印」をつけて下さい。

それぞれ言うと自分は一般的な考え方や決まりに従うタイプだ。 1 2 3 4 5
それぞれ言うと自分は個人の自由より社会の和を重んじるタイプだ。 1 2 3 4 5
一般的に個人の自由は社会において最も大切な価値観の一つだ。 1 2 3 4 5
個人の自由は自分にとって最も大切な価値観の一つだ。 1 2 3 4 5

これでアンケートは終りです。
記入漏れがないかもう一度確認して下さい。

ご協力ありがとうございました。
Appendix 6A Similar and Opposite Concepts of Individual Freedom
Table 6A.1 Occurrence Frequencies: Similar Concepts of Individual Freedom

<table>
<thead>
<tr>
<th>Categories and sub-categories</th>
<th>Australians (645)</th>
<th>Japanese (535)</th>
<th>Categories and sub-categories</th>
<th>Australians (645)</th>
<th>Japanese (535)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (number of words)</td>
<td></td>
<td></td>
<td>% (number of words)</td>
<td></td>
</tr>
<tr>
<td>No control by others</td>
<td></td>
<td></td>
<td>Positive expressions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>being free from control</td>
<td>20% (53)</td>
<td>15% (18)</td>
<td>carefree</td>
<td>33% (10)</td>
<td>3% (1)</td>
</tr>
<tr>
<td>boundless</td>
<td>1% (3)</td>
<td>8% (10)</td>
<td>driving force</td>
<td>3% (1)</td>
<td></td>
</tr>
<tr>
<td>free decision</td>
<td>4% (12)</td>
<td>25% (30)</td>
<td>happiness</td>
<td>22% (11)</td>
<td>6% (2)</td>
</tr>
<tr>
<td>free expression</td>
<td>18% (47)</td>
<td>6% (7)</td>
<td>honesty</td>
<td>6% (3)</td>
<td></td>
</tr>
<tr>
<td>free rein</td>
<td>8% (22)</td>
<td>12% (15)</td>
<td>love</td>
<td>16% (8)</td>
<td></td>
</tr>
<tr>
<td>free religion</td>
<td>1% (3)</td>
<td>0.8% (1)</td>
<td>peace</td>
<td>25% (12)</td>
<td>3% (1)</td>
</tr>
<tr>
<td>Free speech</td>
<td>28% (71)</td>
<td>3% (4)</td>
<td>pleasure</td>
<td>29% (14)</td>
<td>53% (16)</td>
</tr>
<tr>
<td>free thoughts</td>
<td>5% (15)</td>
<td>10% (12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>independence</td>
<td>10% (27)</td>
<td>16% (19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td></td>
<td></td>
<td>Negative expressions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>choice</td>
<td>28% (58)</td>
<td>13% (34)</td>
<td>anarchy</td>
<td>100% (4)</td>
<td>10% (8)</td>
</tr>
<tr>
<td>diversity</td>
<td>5% (12)</td>
<td>2% (6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>individualism</td>
<td>2% (5)</td>
<td>3% (10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>individuality</td>
<td>20% (42)</td>
<td>12% (32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>privacy</td>
<td>5% (12)</td>
<td>8% (22)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responsibility</td>
<td>2% (6)</td>
<td>25% (65)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rights</td>
<td>20% (41)</td>
<td>18% (49)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mutual respects</td>
<td>7% (16)</td>
<td>8% (23)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-intervention</td>
<td>1% (3)</td>
<td>5% (14)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>life</td>
<td>4% (9)</td>
<td>1% (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>13% (85)</td>
<td>3% (14)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>democracy</td>
<td>23% (20)</td>
<td>14% (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voting</td>
<td>9% (8)</td>
<td>0.7% (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equity</td>
<td>37% (32)</td>
<td>14% (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>justice</td>
<td>11% (10)</td>
<td>14% (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>opportunities</td>
<td>15% (13)</td>
<td>50% (7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>free country</td>
<td>2% (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. - The number of frequencies belonging to each category and sub-category are presented in parentheses.
- Proportions of each category out of the total number of words and phrases are presented in bold.
- Proportion of each sub-category out of the total number of words and phrases in its upper-category are presented in a normal style.
Table 6A.2 Categories and Examples: Similar Concepts of Individual Freedom

<table>
<thead>
<tr>
<th>Categories and sub-categories</th>
<th>Examples</th>
<th>Categories and sub-categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>No control by others</td>
<td>People cannot force you to do things, Break from restrictions</td>
<td>justice</td>
<td>Justice, Fairness, Fair</td>
</tr>
<tr>
<td>being free from control</td>
<td>No limitations, No rules, No restrictions</td>
<td>opportunities</td>
<td>Opportunities, Education</td>
</tr>
<tr>
<td>boundless</td>
<td>Ability to choose own destiny, Ability to make own decisions, Own decisions</td>
<td>free country</td>
<td>Free country</td>
</tr>
<tr>
<td>free decision</td>
<td>Free expression, Freedom of expression, Self expression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>free expression</td>
<td>Do whatever you want, Actions</td>
<td>Positive expressions</td>
<td></td>
</tr>
<tr>
<td>free religion</td>
<td>Free religion, Spirituality</td>
<td>carefree</td>
<td>Carefree,</td>
</tr>
<tr>
<td>Free speech</td>
<td>Freedom of speech, Free speech</td>
<td>driving force</td>
<td>Motivation,</td>
</tr>
<tr>
<td>free thoughts</td>
<td>Thoughts, Allowing of beliefs &amp; values, Ideas</td>
<td>happiness</td>
<td>Happiness</td>
</tr>
<tr>
<td>independence</td>
<td>Autonomy, Independence,</td>
<td>honesty</td>
<td>Honest</td>
</tr>
<tr>
<td>Individualism</td>
<td>Personal choice, Choice, Freedom of choice</td>
<td>love</td>
<td>Love</td>
</tr>
<tr>
<td>choice</td>
<td>Multicultural, Diverse, Different, Variety</td>
<td>peace</td>
<td>Peace</td>
</tr>
<tr>
<td>diversity</td>
<td>Individualism</td>
<td>pleasure</td>
<td>Leisure, Relaxed, Fun</td>
</tr>
<tr>
<td>individualism</td>
<td>Unique, Self, Individuality</td>
<td>Negative expressions</td>
<td></td>
</tr>
<tr>
<td>individuality</td>
<td>Own space, Privacy, Personal space</td>
<td>anarchy</td>
<td>War, Anarchy, Conflict</td>
</tr>
<tr>
<td>privacy</td>
<td>Responsibility, Personal responsibility</td>
<td>autocrat</td>
<td>Autocrat</td>
</tr>
<tr>
<td>responsibility</td>
<td>Human rights, Is a right</td>
<td>delinquency</td>
<td>Delinquency</td>
</tr>
<tr>
<td>rights</td>
<td>Respect, Everyone should be accepted everywhere what they are, Dignity</td>
<td>greed</td>
<td>Greed</td>
</tr>
<tr>
<td>mutual respects</td>
<td>Non-intervention, Don’t be controlled by external forces</td>
<td>lack of social harmony</td>
<td>Lack of social harmony</td>
</tr>
<tr>
<td>non-intervention</td>
<td>Life, Living</td>
<td>loneliness</td>
<td>Loneliness</td>
</tr>
<tr>
<td>life</td>
<td>Democracy</td>
<td>selfishness</td>
<td>Selfishness, Egoistic</td>
</tr>
<tr>
<td>Democracy</td>
<td>Voting, Freedom to vote</td>
<td>Harmony</td>
<td></td>
</tr>
<tr>
<td>democracy</td>
<td>Equality, Equity, Free of discrimination</td>
<td>harmony</td>
<td>Harmony</td>
</tr>
<tr>
<td>voting</td>
<td></td>
<td>conformity</td>
<td>Conformity</td>
</tr>
<tr>
<td>equity</td>
<td>Hedonism</td>
<td>Please myself</td>
<td></td>
</tr>
<tr>
<td>Metaphor</td>
<td>Safety</td>
<td>Security, Financial security</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Australia, Nomad, Dove</td>
</tr>
</tbody>
</table>
Table 6A.3 Occurrence Frequencies: Opposite Concepts of Individual Freedom

<table>
<thead>
<tr>
<th>Categories and sub-categories</th>
<th>% (number of words)</th>
<th>Australians (537)</th>
<th>Japanese (516)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>authority</td>
<td>71% (382)</td>
<td>61% (318)</td>
<td></td>
</tr>
<tr>
<td>communist</td>
<td>7% (30)</td>
<td>61% (318)</td>
<td></td>
</tr>
<tr>
<td>confine</td>
<td>15% (61)</td>
<td>1% (6)</td>
<td></td>
</tr>
<tr>
<td>inequality</td>
<td>12% (49)</td>
<td>1% (6)</td>
<td></td>
</tr>
<tr>
<td>intervention</td>
<td>2% (11)</td>
<td>6% (20)</td>
<td></td>
</tr>
<tr>
<td>oppression</td>
<td>18% (69)</td>
<td>9% (29)</td>
<td></td>
</tr>
<tr>
<td>regulations</td>
<td>9% (35)</td>
<td>17% (55)</td>
<td></td>
</tr>
<tr>
<td>restrictions</td>
<td>12% (48)</td>
<td>47% (151)</td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>12% (69)</td>
<td>30% (157)</td>
<td></td>
</tr>
<tr>
<td>grouping</td>
<td>37% (26)</td>
<td>46% (73)</td>
<td></td>
</tr>
<tr>
<td>harmony</td>
<td>12% (19)</td>
<td>12% (19)</td>
<td></td>
</tr>
<tr>
<td>obedience</td>
<td>47% (33)</td>
<td>10% (17)</td>
<td></td>
</tr>
<tr>
<td>social obligation</td>
<td>14% (10)</td>
<td>24% (39)</td>
<td></td>
</tr>
<tr>
<td>patience</td>
<td>5% (9)</td>
<td>5% (9)</td>
<td></td>
</tr>
<tr>
<td>Conflict</td>
<td>2% (10)</td>
<td>3% (10)</td>
<td></td>
</tr>
<tr>
<td>Negative feelings</td>
<td>4% (20)</td>
<td>2% (9)</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>0.5% (3)</td>
<td>0.5% (3)</td>
<td></td>
</tr>
<tr>
<td>Metaphor</td>
<td>10% (56)</td>
<td>3% (19)</td>
<td></td>
</tr>
</tbody>
</table>

Note. - The number of frequencies belonging to each category and sub-category are presented in parentheses. Proportions of each category out of the total number of words and phrases are presented in bold. Proportion of each sub-category out of the total number of words and phrases in its upper-category are presented in a normal style. Blank columns show no occurrence.
### Table 6A.4 Categories and Examples: Opposite Concepts of Individual Freedom

<table>
<thead>
<tr>
<th>Categories and sub-categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td>authority</td>
<td>Government, Authority, Dictatorship</td>
</tr>
<tr>
<td>communist</td>
<td>Communism, Communist</td>
</tr>
<tr>
<td>confine</td>
<td>Trapped, Jail, Imprisonment</td>
</tr>
<tr>
<td>inequality</td>
<td>Discrimination, Racism, Unfairness</td>
</tr>
<tr>
<td>intervention</td>
<td>Censorship, Intervened by others, No privacy</td>
</tr>
<tr>
<td>oppression</td>
<td>Not being able to do what you want to, Individual repression, Being grounded</td>
</tr>
<tr>
<td>regulations</td>
<td>Law, Punishment, Rules</td>
</tr>
<tr>
<td>restrictions</td>
<td>Restriction, Limitations, No choice</td>
</tr>
<tr>
<td><strong>Conformity</strong></td>
<td></td>
</tr>
<tr>
<td>grouping</td>
<td>Clone, Uniformity, Single mindedness</td>
</tr>
<tr>
<td>harmony</td>
<td>Social harmony, Obedience, Dependant of others, Withdrawer</td>
</tr>
<tr>
<td>obedience</td>
<td>Social pressure, Social obligation, Compressed</td>
</tr>
<tr>
<td>social obligation</td>
<td>Patience,</td>
</tr>
<tr>
<td>patience</td>
<td></td>
</tr>
<tr>
<td><strong>Conflict</strong></td>
<td>War, Conflict</td>
</tr>
<tr>
<td><strong>Negative feelings</strong></td>
<td>Sadness, Unsafe, Inhumane</td>
</tr>
<tr>
<td><strong>Responsibility</strong></td>
<td>Responsibility</td>
</tr>
<tr>
<td><strong>Metaphor</strong></td>
<td>Drugs &amp; alcohol, Poverties, Violence</td>
</tr>
</tbody>
</table>
## Appendix 6B EFA Results (Main Study)

Table 6B.1
Second VARIMAX-rotated Principal Axis Factoring Loadings of 11 Items (Australian \(n = 231\))

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>F4*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED3</td>
<td>.66</td>
<td>.20</td>
<td>.19</td>
<td>.03</td>
<td>.52</td>
</tr>
<tr>
<td>PR4</td>
<td>.62</td>
<td>.12</td>
<td>.05</td>
<td>.18</td>
<td>.43</td>
</tr>
<tr>
<td>ED2</td>
<td>.41</td>
<td>.09</td>
<td>.26</td>
<td>-.18</td>
<td>.28</td>
</tr>
<tr>
<td>PR1</td>
<td>.22</td>
<td>.81</td>
<td>.04</td>
<td>.25</td>
<td>.77</td>
</tr>
<tr>
<td>PR2</td>
<td>.20</td>
<td>.54</td>
<td>.24</td>
<td>-.20</td>
<td>.43</td>
</tr>
<tr>
<td>ED4</td>
<td>.02</td>
<td>.06</td>
<td>.48</td>
<td>-.10</td>
<td>.24</td>
</tr>
<tr>
<td>PT2</td>
<td>.13</td>
<td>.06</td>
<td>.47</td>
<td>.09</td>
<td>.25</td>
</tr>
<tr>
<td>PT4</td>
<td>.24</td>
<td>.12</td>
<td>.43</td>
<td>.09</td>
<td>.26</td>
</tr>
<tr>
<td>PT3</td>
<td>.28</td>
<td>.08</td>
<td>.43</td>
<td>.30</td>
<td>.36</td>
</tr>
<tr>
<td>ED1</td>
<td>.05</td>
<td>.34</td>
<td>.39</td>
<td>.02</td>
<td>.27</td>
</tr>
<tr>
<td>PT1</td>
<td>.03</td>
<td>.02</td>
<td>.03</td>
<td>.42</td>
<td>.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalues</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.22</td>
<td>1.21</td>
<td>1.18</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Contribution (%)</td>
<td>10.15</td>
<td>10.08</td>
<td>9.83</td>
<td>3.89</td>
<td></td>
</tr>
<tr>
<td>Cumulative contribution (%)</td>
<td>10.15</td>
<td>20.23</td>
<td>30.06</td>
<td>33.95</td>
<td></td>
</tr>
</tbody>
</table>

*Note. * = Factor loading > .37 is in bold. ** = Communalities*

Tests of assumptions of EFA:
- Determinant of correlation matrix = .195
- KMO = .752
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item > .50
Table 6B.2  
Second VARIMAX-rotated Principal Axis Factoring Loadings of 9 Items (Japanese $n = 252$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>F3*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT3</td>
<td>.59</td>
<td>.06</td>
<td>.04</td>
<td>.35</td>
</tr>
<tr>
<td>PR4</td>
<td>.50</td>
<td>.03</td>
<td>-.07</td>
<td>.26</td>
</tr>
<tr>
<td>ED3</td>
<td>.46</td>
<td>.31</td>
<td>.06</td>
<td>.31</td>
</tr>
<tr>
<td>PT4</td>
<td>.44</td>
<td>-.04</td>
<td>.06</td>
<td>.20</td>
</tr>
<tr>
<td>PR3</td>
<td>.31</td>
<td>.18</td>
<td>-.01</td>
<td>.13</td>
</tr>
<tr>
<td>PR1</td>
<td>.06</td>
<td>.86</td>
<td>.12</td>
<td>.76</td>
</tr>
<tr>
<td>PT1</td>
<td>.08</td>
<td>-.02</td>
<td>.52</td>
<td>.27</td>
</tr>
<tr>
<td>PR2</td>
<td>.16</td>
<td>.20</td>
<td>.46</td>
<td>.27</td>
</tr>
<tr>
<td>ED4</td>
<td>-.23</td>
<td>.02</td>
<td>.41</td>
<td>.22</td>
</tr>
</tbody>
</table>

| Eigenvalues | 1.18 | .91 | .67 |
| Contribution (%) | 13.15 | 10.21 | 7.44 |
| Cumulative contribution (%) | 13.15 | 23.36 | 30.80 |

Note. * = Factor loading >.35 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .432
- KMO = .623
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50
Table 6B.3
Second Principal Axis Factoring Loadings of 6 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>F2*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV8</td>
<td>.64</td>
<td>-.25</td>
<td>.48</td>
</tr>
<tr>
<td>GV7</td>
<td>.61</td>
<td>-.13</td>
<td>.39</td>
</tr>
<tr>
<td>GV4</td>
<td>.41</td>
<td>-.16</td>
<td>.19</td>
</tr>
<tr>
<td>GV1</td>
<td>.38</td>
<td>.01</td>
<td>.14</td>
</tr>
<tr>
<td>GV3</td>
<td>.31</td>
<td>.19</td>
<td>.13</td>
</tr>
<tr>
<td>GV2</td>
<td>.47</td>
<td>.53</td>
<td>.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factors</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalues</td>
<td>1.40</td>
<td>.42</td>
</tr>
<tr>
<td>Contribution (%)</td>
<td>23.32</td>
<td>7.00</td>
</tr>
<tr>
<td>Cumulative contribution (%)</td>
<td>23.32</td>
<td>30.32</td>
</tr>
</tbody>
</table>

*Note. *= Factor loading >.37 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .559
- KMO = .695
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50, except for GV6 (.49)

Table 6B.4
Third Principal Axis Factoring Loadings of 6 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F1*</th>
<th>Com**</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV7</td>
<td>.66</td>
<td>.44</td>
</tr>
<tr>
<td>GV8</td>
<td>.65</td>
<td>.42</td>
</tr>
<tr>
<td>GV4</td>
<td>.40</td>
<td>.16</td>
</tr>
<tr>
<td>GV1</td>
<td>.38</td>
<td>.15</td>
</tr>
<tr>
<td>GV2</td>
<td>.32</td>
<td>.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factors</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalues</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td>Contribution (%)</td>
<td>25.28</td>
<td></td>
</tr>
<tr>
<td>Cumulative contribution (%)</td>
<td>25.28</td>
<td></td>
</tr>
</tbody>
</table>

*Note. *= Factor loading >.37 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .616
- KMO = .700
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50
Table 6B.5
Fourth Principal Axis Factoring Loadings of 4 Items (Australian n = 231)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor 1*</th>
<th>Communality**</th>
</tr>
</thead>
<tbody>
<tr>
<td>GV8</td>
<td>.68</td>
<td>.46</td>
</tr>
<tr>
<td>GV7</td>
<td>.64</td>
<td>.40</td>
</tr>
<tr>
<td>GV4</td>
<td>.42</td>
<td>.18</td>
</tr>
<tr>
<td>GV1</td>
<td>.36</td>
<td>.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalues</th>
<th>Contribution (%)</th>
<th>Cumulative contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.17</td>
<td>29.23</td>
<td>29.23</td>
</tr>
</tbody>
</table>

Note. * = Factor loading >.37 is in bold. ** = Communalities,

Tests of assumptions of EFA:
- Determinant of correlation matrix = .667
- KMO = .673
- Sign. of Bartlett’s test of sphericity = .000
- Measures of sampling adequacy value of each item >.50
Appendix 7A Rescaled Results of Q12-1, Q12-2, Q12-3, Q12-4, and Q12-5

The new scale grouped ‘4’ and ‘5’ of the 5-point Likert scales as respondents’ agreement with the given statement; ‘1’ and ‘2’ as disagreement and ‘3’ as uncertainty of agreement or disagreement. The interest was agreement and disagreement alone, therefore, ‘3’ was excluded from analysis. Table 7A.1 provides occurrence frequencies of respondents who disagreed (1 or 2 with 5-point Likert scale) in the ‘D’ column and agreed (4 or 5 with 5-point Likerts scale) in the ‘A’ column and their proportions for each n in parentheses.

Table 7A.1
General Attitudes and Behaviours towards Government’s Social Marketing Campaigns

<table>
<thead>
<tr>
<th>Items</th>
<th>Australians</th>
<th></th>
<th>Australians</th>
<th></th>
<th>Japanese</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ethnicities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n = 231</td>
<td>n = 252</td>
<td>n = 127</td>
<td>n = 104</td>
<td>n = 76</td>
</tr>
<tr>
<td>Q12-1</td>
<td>Disregard</td>
<td>D 128 (55%)</td>
<td>144 (57%)</td>
<td>81 (64%)</td>
<td>47 (45%)</td>
<td>47 (62%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 22 (10%)</td>
<td>52 (21%)</td>
<td>7 (6%)</td>
<td>15 (14%)</td>
<td>15 (20%)</td>
</tr>
<tr>
<td>Q12-2</td>
<td>No &amp; No</td>
<td>D 95 (35%)</td>
<td>124</td>
<td>59 (46%)</td>
<td>36 (35%)</td>
<td>45 (59%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 63 (23%)</td>
<td>60 (24%)</td>
<td>23 (18%)</td>
<td>40 (38%)</td>
<td>17 (22%)</td>
</tr>
<tr>
<td>Q12-3</td>
<td>No &amp; Do</td>
<td>D 62 (27%)</td>
<td>85 (34%)</td>
<td>36 (28%)</td>
<td>26 (25%)</td>
<td>30 (39%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 66 (29%)</td>
<td>49 (19%)</td>
<td>33 (26%)</td>
<td>33 (32%)</td>
<td>14 (18%)</td>
</tr>
<tr>
<td>Q12-4</td>
<td>Do &amp; No</td>
<td>D 92 (40%)</td>
<td>63 (25%)</td>
<td>52 (41%)</td>
<td>40 (38%)</td>
<td>17 (22%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 49 (21%)</td>
<td>86 (34%)</td>
<td>26 (20%)</td>
<td>23 (22%)</td>
<td>27 (36%)</td>
</tr>
<tr>
<td>Q12-5</td>
<td>Do &amp; Do</td>
<td>D 55 (23%)</td>
<td>98 (39%)</td>
<td>24 (19%)</td>
<td>31 (30%)</td>
<td>28 (37%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 99 (43%)</td>
<td>51 (20%)</td>
<td>62 (49%)</td>
<td>37 (36%)</td>
<td>17 (22%)</td>
</tr>
</tbody>
</table>

Notes. ‘D’ represents disagreement, ‘A’ represents agreement
Frequency is shown with number in each cell and its proportion for each n is shown in parentheses after the frequency.

The Chi-squared test was used to determine whether there was a significant difference between agreement and disagreement for each question. The Chi-square test revealed:
- There were significant differences between disagreement and agreement of Disregards, No & No, Do & No, and Do & Do towards government’s social marketing campaigns in the Australian frequencies ($\chi^2(1) = 74.907, p = 0.000$, $\chi^2(1) = 6.481, p = 0.011$, $\chi^2(1) = 13.113, p = 0.000$, and $\chi^2(1) = 12.571, p = 0.000$ respectively). However, there was no significant difference between disagreement and agreement of No & Do towards the campaigns ($\chi^2(1) = 0.125, p = 0.724$);

- There were significant differences between disagreement and agreement of Disregards, No & No, No & Do, and Do & Do towards government’s social marketing campaigns in the Japanese frequencies ($\chi^2(1) = 743.184, p = 0.000$, $\chi^2(1) = 22.261, p = 0.011$, $\chi^2(1) = 9.672, p = 0.002$, and $\chi^2(1) = 14.826, p = 0.000$ respectively). However, there was no significant difference between disagreement and agreement of Do & No towards the campaigns ($\chi^2(1) = 3.550, p = 0.060$);

- There were significant differences between disagreement and agreement of Disregards, No & No, Do & No, and Do & Do towards government’s social marketing campaigns in the female Australian frequencies ($\chi^2(1) = 62.227, p = 0.000$, $\chi^2(1) = 15.805, p = 0.000$, $\chi^2(1) = 8.667, p = 0.003$, and $\chi^2(1) = 16.791, p = 0.000$ respectively). However, there was no significant difference between disagreement and agreement of No & Do towards the campaigns ($\chi^2(1) = 0.130, p = 0.718$);

- There were significant differences between disagreement and agreement of Disregards, and Do & No towards government’s social marketing campaigns in the male Australian frequencies ($\chi^2(1) = 16.516, p = 0.000$, and $\chi^2(1) = 4.587, p = 0.032$ respectively). However, there was no significant difference between disagreement and agreement of No & No, No & Do, and Do & Do towards the campaigns ($\chi^2(1) = 0.211, p = 0.646$, $\chi^2(1) = 0.831, p = 0.362$, and $\chi^2(1) = 0.529, p = 0.467$);

- There were significant differences between disagreement and agreement of Disregards, No & No, and No & Do towards government’s social marketing campaigns in the female Japanese frequencies ($\chi^2(1) = 16.516, p = 0.000$, $\chi^2(1) = 12.645, p = 0.000$, and $\chi^2(1) = 5.818, p = 0.016$ respectively). However, there was no significant difference between disagreement and agreement of Do & No and Do & Do towards the campaigns ($\chi^2(1) = 2.273, p = 0.132$ and $\chi^2(1) = 2.689, p = 0.101$ respectively); and
There were significant differences between disagreement and agreement of Disregards, No & No, No & Do, and Do & Do towards government’s social marketing campaigns in the male Japanese frequencies ($\chi^2(1) = 26.866, p = 0.000$, $\chi^2(1) = 10.623, p = 0.001$, $\chi^2(1) = 4.444, p = 0.035$, and $\chi^2(1) = 12.462, p = 0.000$ respectively). However, there was no significant difference between disagreement and agreement of Do & No towards the campaigns ($\chi^2(1) = 1.610, p = 0.205$).
Appendix 7B Rescaled Results of Q13-1 and Q13-2

The new scale grouped ‘4’ and ‘5’ of the 5-point Likert scales as agreement; ‘1’ and ‘2’ as disagreement and ‘3’ as uncertainty of agreement or disagreement. The interest was not uncertainty of agreement or disagreement; therefore, ‘3’ was excluded from analysis. Table 7B.1 provides occurrence frequencies of respondents who disagreed with Q13-1 in the ‘NC’ (No Conformity) column and agreed in the ‘C’ (Conformity) column. The occurrence frequencies of respondents who disagreed with Q13-2 are provided in the ‘NSH’ (No Social Harmony) column and agreed in the ‘SH’ (Social Harmony) column in the table. The proportions of each category for n are reported in parentheses in the table as well.

Table 7B.1
Conformity, Social Harmony, and Importance of Individual Freedom

<table>
<thead>
<tr>
<th>Items</th>
<th>Ethnicities</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australians</td>
<td>Japanese</td>
<td>Australians</td>
<td>Japanese</td>
</tr>
<tr>
<td></td>
<td>n = 231</td>
<td>n = 252</td>
<td>n = 127</td>
<td>n = 104</td>
</tr>
<tr>
<td>Q13-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>NC</td>
<td>39 (17%)</td>
<td>54 (21%)</td>
<td>16 (13%)</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>133 (58%)</td>
<td>154 (61%)</td>
<td>80 (63%)</td>
</tr>
<tr>
<td>Q13-2</td>
<td>NSH</td>
<td>61 (26%)</td>
<td>54 (21%)</td>
<td>31 (24%)</td>
</tr>
<tr>
<td>Social Harmony</td>
<td>SH</td>
<td>83 (36%)</td>
<td>123 (49%)</td>
<td>46 (36%)</td>
</tr>
</tbody>
</table>

Notes: ‘NC’ represents No Conformity, ‘C’ represents Conformity, ‘NSH’ represents No Social Harmony, and ‘SH’ represents Social Harmony.

Frequency is shown with number in each cell and its proportion for each n is shown in parentheses after the frequency.

The Chi-squared test was used to determine whether there was a significant difference between NC and C, and NSH and SH. The Chi-square test revealed:

- There were significant differences between NC and C in the Australian frequencies ($\chi^2(1) = 51.372, p = 0.000$). However, there was no significant difference between NSH and SH ($\chi^2(1) = 3.361, p = 0.067$);
• There were significant differences between NC and C, and NSH and SH in the 
  Japanese frequencies ($\chi^2(1) = 48.077$, $p = 0.000$ and $\chi^2(1) = 26.898$, $p = 0.000$
  respectively);

• There were significant differences between NC and C in the female Australian
  frequencies ($\chi^2(1) = 42.667$, $p = 0.000$). However, there was no significant
  difference between NSH and SH ($\chi^2(1) = 2.922$, $p = 0.087$);

• There were significant differences between NC and C in the male Australian
  frequencies ($\chi^2(1) = 411.842$, $p = 0.000$). However, there was no significant
  difference between NSH and SH ($\chi^2(1) = 0.731$, $p = 0.392$);

• There were significant differences between NC and C, and NSH and SH in the
  female Japanese frequencies ($\chi^2(1) = 26.797$, $p = 0.000$ and $\chi^2(1) = 14.519$, $p =
  0.000$ respectively); and

• There were significant differences between NC and C, and NSH and SH in the
  male Japanese frequencies ($\chi^2(1) = 23.374$, $p = 0.000$ and $\chi^2(1) = 13.667$, $p =
  0.000$ respectively).